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ABSTRACT

This study reported methodology and results of a longitudinal evaluation of elementary students. With segregated classroom settings used as controls, students were placed in each of the following experimental classroom types: (1) those with size reduced and compensatory features involving primary-level students in an all-black school; (2) those where intermediate grade black children were transferred to several receiving schools with all white enrollment; and, (3) those which brought white pupils into inner city schools and provided for voluntary transfer of inner city pupils to outer city schools. Findings of the study concluded that students in segregated settings (control) achieved less than did pupils in compensatory or integrated settings. (Author/DM)

CITY SCHOOL DISTRICT
ROCHESTER, NEW YORK

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SUPERINTENDENT OF SCHOOLS

FINAL REPORT:
A THREE YEAR LONGITUDINAL STUDY TO ASSESS A FIFTEEN POINT PLAN TO REDUCE RACIAL ISOLATION AND PROVIDE QUALITY INTEGRATED EDUCATION FOR ELEMENTARY LEVEL PUPILS

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CITY SCHOOL DISTRICT
ROCHESTER, NEW YORK

DIVISION OF
PLANNING AND RESEARCH

DECEMBER 1970

AN ABSTRACT OF
A THREE YEAR LONGITUDINAL STUDY TO ASSESS THE FIFTEEN POINT PLAN

FIFTEEN POINT PLAN: PURPOSE

Two overriding goals characterized the Fifteen Point Plan, a plan approved by the Board of Education in early 1967. They were the reduction of racial isolation in the schools and the provision of quality integrated education for all children. Though not stated in these goals, but nonetheless a vital feature of the plan, was an experiment involving pupils in compensatory education as well.

The design formulated for evaluating the plan featured a longitudinal approach in which the effects of various school programs on pupil growth were assessed. The time span assigned for evaluating the plan was the three year period extending from September 1967 through June 1970. This article is an abstract of the comprehensive evaluation report completed by the District's Division of Planning and Research in the Fall of 1970.

PROGRAM ASSESSMENT

Three phases of the Fifteen Point Program were assessed and reported. They involved the scholastic growth of pupils who participated in the following classroom settings:

(1) *COMPENSATORY EDUCATION:* The reduction of class size (15-18 pupils per teacher and teacher aide) and the institution of compensatory services at School No. 3, a primary school having a virtually total black pupil enrollment

(2) *INTEGRATION-OUT:* The transfer of the School No. 3 intermediate grade (4-6) pupils to several receiving schools having exclusively white enrollees

(3) *INTEGRATION-IN and INTEGRATION-OUT:* The Expanded Open Enrollment Program at the "enriched" Experimental School No. 2 that brought white pupils into an inner city school setting and provided for inner city pupils to transfer voluntarily to outer city schools.

Comparisons were made between groups of pupils representing each of the above emphases. In addition, the scholastic growth of black pupils involved in these approaches was contrasted with that of similar black pupils enrolled in segregated classes (control classes). Moreover, the performance of white pupils was also included for certain comparisons.

PUPIL POPULATION

Overall, pupils enrolled at twenty-two elementary schools were involved in features of the Fifteen Point Plan. For program evaluation, however, the performance of pupils enrolled at only eleven schools was appraised in the data analysis. Although most of the pupils whose performance was assessed were black pupils, the scholastic growth of white pupils enrolled in the various classroom settings was also submitted to statistical analysis. Specifically, the performance of white pupils who transferred from their predominantly white neighborhood schools to attend classes at the inner city school were compared with their former school counterparts and, whenever feasible, with their new classmates.

For all groups, pupil mobility adversely affected sample size for each of the components analyzed. This became true during the third and final year when many of the original pupil participants had then shared in a variety or combination of educational experiences. Except for one grouping, only those pupils who had been involved for two or three consecutive years in their *compensatory*, *integrated*, or *segregated* classes were included. The lone exception delineates groups of pupils who had two years of segregated classroom experiences followed by a year of integrated experiences at the Experimental School; these groups are clearly identified in the report (Questions Seven and Eight).

PUPIL VARIABLES ASSESSED

For this study, scholastic growth was equated to three pupil variables. They were pupil achievement, measured by various standardized tests; pupil school attendance, expressed as the number of days students were absent from school from September through June; and teachers' perceptions of pupils' social growth and work habits. For the latter, the perceptions were translated to a numerical scale ("1" excellent to "5" poor). Both pupil attendance and teacher perceptions were recorded for each of the final two years covered in the study. However, pupil achievement for each group was viewed for the full two or three years of the treatment period and was assigned greater value than the other two variables in the data analysis. Tables showing the comparisons of pupils involved in the various approaches are presented in the Appendix of the Final Report.

STATISTICAL METHODS AND PROCEDURES

If groups being compared appeared to be similar on pretest reading measures, t-tests were computed for the statistical analyses. When there was not a satisfactory pretest match, a one-way analysis of covariance was substituted. These statistical procedures were used to help provide answers to the nine research questions raised in the study. Moreover, the .05 level of confidence was established as acceptable for determining the significance for any one analysis.

All standardized posttests for pupils in Grades 2 through 6 were administered in May 1970. Pupils involved for three years were pretested near the beginning of the 1967-68 school year while the two year participants were given pretests in early October 1968. (Amplification of the statistical procedures and the listing of standardized instruments are presented in the Final Report.)

FINDINGS

1. Black pupils enrolled in *segregated* classes at the school having enriched emphases were not appreciably different in their scholastic performance from similar pupils enrolled in *segregated* classes at control schools.

2. Black pupils enrolled in *compensatory* classes achieved greater scholastic gains than black pupils in *segregated* classes.

3. Black pupils in *integrated* classes tended to show greater achievement gains than black pupils in *segregated* classes.

4. Black pupils in *compensatory* classes achieved as well as black pupils in *integrated* classes.

5. As revealed in the New York State Pupil Evaluation Program results, pupils in *compensatory* classes were the only students of those assessed in the Fifteen Point Program who recorded gains in their mean percentile standing during the first two grades of school.

6. Black pupils enrolled in *integrated* classes at their neighborhood school were not appreciably different in their performance than similar pupils attending classes in outer city schools.

7. There were no appreciable differences in outcomes between white pupils enrolled at an inner city school and white pupils attending their neighborhood schools.

8. Black pupils and white pupils who scored similarly on pretest measures and who attended *integrated* classes tended to have similar outcomes three years later.

9. Black pupils *integrated* at the primary level (Grades K-3) tended to show relatively higher scholastic gains than those black pupils who became *integrated* at the intermediate level (Grades 4-6).

10. Pupils having stability in residency reflected higher achievement outcomes in data obtained from the New York State Pupil Evaluation Program.

11. Black pupils attending *segregated* classes fared least well on the measures used for assessing pupils enrolled in the various components of the Fifteen Point Program.

12. Children who attended schools located in their neighborhood recorded fewer days of absenteeism than those enrolled in schools outside of their residential district.

CAUTIONS

Longitudinal studies of this type are affected by numerous uncontrollable program changes and design limitations. Among those affecting this study in particular were pupil mobility, teacher turnover, teacher differences, program differences, community pressures, and sample sizes. These factors must be kept in mind as the reader reflects upon the findings. While the effort has been made to describe and elaborate each more fully in the comprehensive report, it must be noted that the findings were relevant for a specific population, i.e. children enrolled in selected elementary schools of Rochester, New York during the three school years from September 1967 through June 1970.

NOTE: A copy of the *FINAL REPORT: A THREE YEAR LONGITUDINAL STUDY TO ASSESS A FIFTEEN POINT PLAN TO REDUCE RACIAL ISOLATION AND PROVIDE QUALITY INTEGRATED EDUCATION FOR ELEMENTARY SCHOOL PUPILS* is available through the Division of Planning and Research, City School District, 13 Fitzhugh Street S., Rochester, New York 14614

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PREFACE

Two overriding objectives characterized the Fifteen Point Plan, a plan adopted by the Rochester Board of Education in February 1967. They were:

- The reduction of racial isolation in the schools
- The provision of quality integrated education for all children

In this third and final evaluation of selected parts of the Fifteen Point Plan, effort was made to recapitulate salient features leading up to its adoption, and to assess pupil growth and achievement after two or three years of direct participation in the variously defined classroom settings. Specifically, black pupils enrolled in racially segregated, compensatory, and integrated classrooms were compared in terms of scholastic achievement as measured by selected standardized tests, school attendance, and social growth and work habits as perceived by the classroom teacher. In addition, white pupils who transferred from their predominantly white neighborhood schools to attend classes at an inner city school, were compared with their home school counterparts and, whenever feasible, with their new classmates on the same bases.

At the beginning of the Fifteen Point Program, it was believed that at least three years of intensive followup of pupils participating in each of the components was necessary to assess the program adequately. Now in retrospect, it appears that this choice was discreet since both pupil mobility and changing instructional emphases would have affected prolonged or plausible followup efforts.

Therefore, this final report surpasses the scope of the two earlier interim reports. Occasionally, reference is made to the evidence cited in those reports; however, the findings and conclusions described in the following pages generally supplant those inferred from the preceding studies.

An undertaking of this magnitude necessitates the cooperation of a host of people. Among those to whom appreciation is expressed are the pupils, teachers, and principals of the participating schools, Division of Planning and Research Civil Service personnel (Donna Beyea, Dorothy Greenbaum, Evelyn Hoffman, Patricia Kelly, Veronica Poarch, and Louise Waide), and other Central Office representatives, namely, John Griffith, Charles Messerich, Dr. George Rentsch, and David Weart. Dr. Russel Green's assistance as a Research Consultant in establishing the research design and reviewing the outcomes deserves special mention.

All of the above people are gratefully acknowledged for their contributions in completing this report on the Fifteen Point Program.

Orrin H. Bowman

CHAPTER ONE

THE FIFTEEN POINT PLAN IN PERSPECTIVE

BACKGROUND

On August 27, 1963, the Board of Education of the City School District of Rochester, New York, unanimously adopted a policy statement committing its future actions to the reduction of racial imbalance in schools where such imbalance existed. In its policy statement, the Board recognized that "one of the functions of the public schools is to prepare children for life in a democratic society" and that "the fulfillment of this function depends in part upon the degree to which children have opportunities during their public school careers to become acquainted with children from a variety of cultures."

As an outgrowth of its policy statement, the Board of Education on November 21, 1963 directed the administration to initiate steps to implement the Open Enrollment Plan. This plan established the practice of children being voluntarily transferred into one of several schools in which there was both available space and where the racial composition needed greater balancing. On February 3, 1964, approximately 500 children from the inner city began this new experience. As a result of the Open Enrollment Program, every elementary school in the City School District soon had some black children included in its enrollment.

Following the implementation of the Open Enrollment Plan, the West Irondequoit Central School District, a suburban district contiguous to the northern border of Rochester, requested the transfer of children from the inner city to its schools. Upon approval of both Boards of Education, the West Irondequoit Public Schools enrolled twenty-five first grade pupils from Rochester's William H. Seward School No. 19 in September 1965. Thus, the first cooperative effort of urban and suburban districts in Monroe County began. In subsequent years additional inner city first graders continued to enter the West Irondequoit Public Schools so that in September 1969, eighty-seven children were attending the several elementary schools of this suburban district.

Other school districts soon expressed similar interest and adopted policies which brought inner city pupils into their schools. Following a summer program in 1966, the State University College at Brockport Campus School enrolled thirty-two Rochester children for the 1966-67 school year. This program was expanded in the Fall of 1967 to include eighty children, increased to 112 for 1968-69, and enrolled a total of 150 pupils for the 1969-70 school year. In February 1967, the Brighton Public Schools enrolled fifty-seven elementary level children from the City School District and continued the program during the succeeding three years. To date, some 581 Rochester pupils

attend school outside of the City School District. In addition to the aforementioned public school districts, Rochester pupils transferred to public and/or parochial schools in Penfield, Pittsford, Wheatland-Chili, Hilton, Greece, and East Rochester. A private school, Harley, and the Rochester Christian School complete this listing.

As a result of these various transfer programs, many children from racially imbalanced schools have participated in integrated school experiences during the past six years. Although implementation of these programs has contributed toward reducing the racial imbalance in many of the receiving schools, in other schools of the city the imbalance continued to increase, largely because of housing practices.

THE FIFTEEN POINT PLAN

In a major effort to offer a long-range solution to the problem of racial imbalance, the City School District during the 1966-67 school year prepared a series of plans for the desegregation of the elementary schools. These plans were presented to the Board of Education on February 1, 1967. Essentially, three locally developed plans and a fourth plan, developed by the Center for Urban Education of New York City, were included in the report. Both tactical interim steps as well as long-range strategic proposals were presented. Copies of this report entitled, Desegregation of the Elementary Schools, are on file with the New York State Education Department.

After several weeks of intensive community deliberation and Board of Education study, the Rochester Board of Education adopted a Fifteen Point Plan to further reduce racial isolation. This plan utilized selected features of the Combination Plan presented in the desegregation report, but added specific steps which could be implemented in the immediate future. Overall, the Fifteen Point Plan posited dual objectives. They were the reduction of racial isolation and the provision of quality integrated education for all children. Its fifteen features provide the source from which the title is derived and consist of the following points:

1. Use selected features of the Combination Plan but add additional steps within the city together with those that may be made possible through the cooperation of the larger community.

2. Reduce class size sharply in September 1967 in Grades K-3 at Nathaniel Rochester School No. 3 to approximately fifteen; in addition, a teacher aide, living in the immediate neighborhood, may be employed for each classroom; a fulltime specialist in reading instruction will be added to the staff of School No. 3.

3. Provide a reading specialist for each inner city school in addition to the present supervising and helping teacher programs.

4. Transfer children, with parental permission, in Grades 4-6 from School No. 3 to schools in which space exists or can be created by the transfer of some seventh graders to nearby high schools; the receiving schools will include Schools No. 21, 30, 34, 38, 41, 42, 43, and 44.

5. Transfer three M.A.P. classes for the gifted to Clara Barton School No. 2 in September 1967 and invite applications from suburban parents for transfer of gifted children to these classes on a tuition basis, as space permits.

6. Implement in September 1967 a program of voluntary, reverse open enrollment to the two new beautiful schools, Clara Barton School No. 2 and Dag Hammarskjold School No. 6, and plan for the establishment of a summer school program, open to students in the city at large, at these two schools under Title I of the Elementary and Secondary Education Act of 1965 for the Summer of 1967.

7. The above voluntary, reverse open enrollment program and relocation of some classes for the gifted for the public schools will be accompanied by a similar program in the Catholic schools as announced by the Right Reverend Monsignor Roche, Superintendent of Diocesan Schools.

8. Implement the interim World of Inquiry School in September 1967 under Title III of the Elementary and Secondary Education Act of 1965; this interim school, located in the inner city, would house 130 children and would be an integrated school with registration for attendance open [to pupils from both the city and the suburbs].

9. Continue to work for the expansion of urban-suburban pupil transfer programs for both the Summer of 1967 and the 1967-68 school year.

10. Continue the integrated prekindergarten program at Sylvanus A. Ellis School No. 26.

11. Encourage the development of a voluntary cooperative federation of school districts in the region to discuss and plan ways of reducing racial isolation in Monroe County as well as other matters of mutual concern.

12. Continue the Open Enrollment and TRIAD Programs and encourage additional participation.

13. Cooperate fully with all community agencies whose programs seek to remove the basic causes of racial isolation.

14. Work closely with the office of the coordinator of the Demonstration Cities Program and other related city departments to strengthen the total effort to upgrade the city through new educational facilities and services; in addition, continue to study the replacement of schools with a view toward site selection that will improve our total educational program to the greatest extent possible as we attempt to achieve quality integrated education.

15. Request the Board of Regents and the Commissioner of Education of New York State to assist the Board of Education in its planning by sending a report on progress made toward the elimination of legal and financial barriers to reducing racial isolation in the schools in the Rochester area.

IMPLEMENTING THE PLAN

Planning the implementation phases of the Fifteen Point Plan began immediately after its adoption in February 1967. In addition to involving State Education Department officials, it necessitated extensive local community interaction. Many parents, educators, and community officials cooperated in resolving the numerous problems confronting them. By September 1967, key aspects of the Fifteen Point Plan had become operational; their effects have continued to pervade both the Rochester City Schools and various suburban school districts through this writing.

This report, along with its two antecedent reports, constitutes the attempt to assess selected features of the Fifteen Point Plan as demonstrated by pupil achievement and growth in different classroom settings. These settings, the measurements used, and the analyses made are described more fully in the ensuing sections. To recapitulate briefly, this report contains the evaluation of three major portions of the Fifteen Point Plan:

1. Reduction of class size in the primary grades at Nathaniel Rochester School No. 3

2. Transfer of intermediate grade pupils from Nathaniel Rochester School No. 3

3. Expanded Open Enrollment at Clara Barton School No. 2

THE SELECTED FEATURES ASSESSED

The selected features of the Fifteen Point Program covered by this report may be reduced to three major components. The first represents that style of education which has come to be known as "compensatory education." In this approach, no attempt was made to desegregate the racially imbalanced neighborhood school in the black community. Rather, energies and funds were channeled into avenues that permitted smaller class sizes by increasing the ratio of adults to pupils, and expanding provisions for supportive and remedial services.

The assumption on which compensatory education is based is the belief that greater pupil-teacher interaction yields higher pupil achievement. Stated specifically for this study, the more a teacher or an authorized adult works and interacts with an educationally disadvantaged pupil in his neighborhood school, where the average class numbers 15-18 pupils, the greater are the pupil's achievement and growth on selected scholastic measures.

The second component features integration of children by way of both the traditional manner; i.e. where black children transfer to schools which have predominantly white pupil populations (Integration-Out) and the reverse, a unique provision of pupil transfer in which children from predominantly white schools transfer into the core or inner city schools with a pupil population predominantly black (Integration-In at Schools No. 2 and 6). No overt attempts were made to restrict class size as characterized by the compensatory educational classes. Thus, the implicit benefits of integrated education are subsumed from the interaction of teachers and pupils in standard class size settings (avg. 27) where some pupil ethnic differences (and in this case economic differences) are prevalent. Stated somewhat differently, the pupil benefits derived in this context are believed to be associated with both teacher influences and the exchanges among/between classmates who have diverse backgrounds.

Segregation is the final component and represents the ethnic status at selected inner city schools where no overt intervention has occurred. It arises largely from housing practices exemplified in a particular neighborhood. While segregation exists in both white and black racially dominated neighborhoods, this study focuses primarily upon contiguous schools of the inner city. Hence, classes that are described as segregated refer to those consisting of approximately 24-28 black pupils who are essentially similar to each other in terms of socioeconomic characteristics and who attend their neighborhood inner city schools. Specifically, selected pupils from classes at Clara Barton School No. 2 and George Mather Forbes School No. 4 represent the segregated pupils in this report.

NOTE: Because unusual pressures occurred at the Segregated Control School (School No. 4) during the 1968-69 school year, two additional control type schools were identified and utilized in data analysis. This will be described more fully in later sections of this report.

CHAPTER TWO

PARTICIPATING SCHOOLS AND COMPONENT DESCRIPTIONS

The first ethnic data for the City School District were recorded for the 1962-63 school year. With an ethnic minority enrollment (K-12) of approximately 7500 pupils at that time, this figure represented 18 percent of the district's enrollment. For the 1969-70 school year, the most recent year for which these data were available, the ethnic minority enrollment was in excess of 15,300 pupils or approximately 35 percent of the district's total.

Thus, the change for an 8-year enrollment span shows more than a doubling of ethnic minority enrollees in the public schools of Rochester. Moreover, certain geographical areas of the city became high density areas for the ethnic minority population. In Rochester specifically, the ethnic minority population concentrated largely in the "inner city." As a result of the residentiary patterns, some school enrollments became predominantly ethnic minority pupils while others remained predominantly white.

As stated earlier, the Fifteen Point Program was implemented in the Fall of 1967. The participating elementary schools were classified into two broad categories, i.e. inner and outer city schools. The inner city schools were characterized as having predominantly black pupil enrollments while the outer city schools had predominantly white pupil enrollments. With the implementation of the Fifteen Point Program, the percentage of ethnic minority enrolled at many of the schools was changed; a few significantly.

To elaborate, the inner city schools participating in the program were Nathaniel Rochester School No. 3, the Compensatory type School (Component One), Clara Barton School No. 2, the Experimental School (Components Two-Three), and George Mather Forbes School No. 4, the main Control School (Component Three). Outer city participating schools included Schools No. 1, 7, 23, 30, 38, 39, 41, and 46 with each receiving inner city resident black pupils. In addition, Schools No. 21, 34, 42, 43, and 44 were the prime recipients of the intermediate level children who were transferred from School No. 3 to effect the compensatory emphasis. Moreover, several outer city schools shared in the unique feature that provided the voluntary transfer of white pupils into the inner city Experimental School No. 2, thus effecting a two-way transfer exchange.

Table 1 shows the enrollment and percentage of ethnic minority pupils (primarily black) by school for the 1966-67 school year, the year preceding implementation of the Fifteen Point Program, and for each of the subsequent three years during which the program was in effect. These were the selected schools from which data were gathered for assessing the effectiveness of the Fifteen Point Program.

As shown, two of the three inner city elementary schools were populated almost exclusively by black pupils for the four years recorded. School No. 2 had a similar enrollment for the first year, but changed to approximately 81 percent for the following 3-year experimental time period. Outer city school ethnic minority

TABLE 1

ENROLLMENT (NUMBER) AND ETHNIC CENSUS (PERCENTAGE) FOR SELECTED SCHOOLS PARTICIPATING IN THE FIFTEEN POINT PROGRAM 1966-67 -- 1969-70

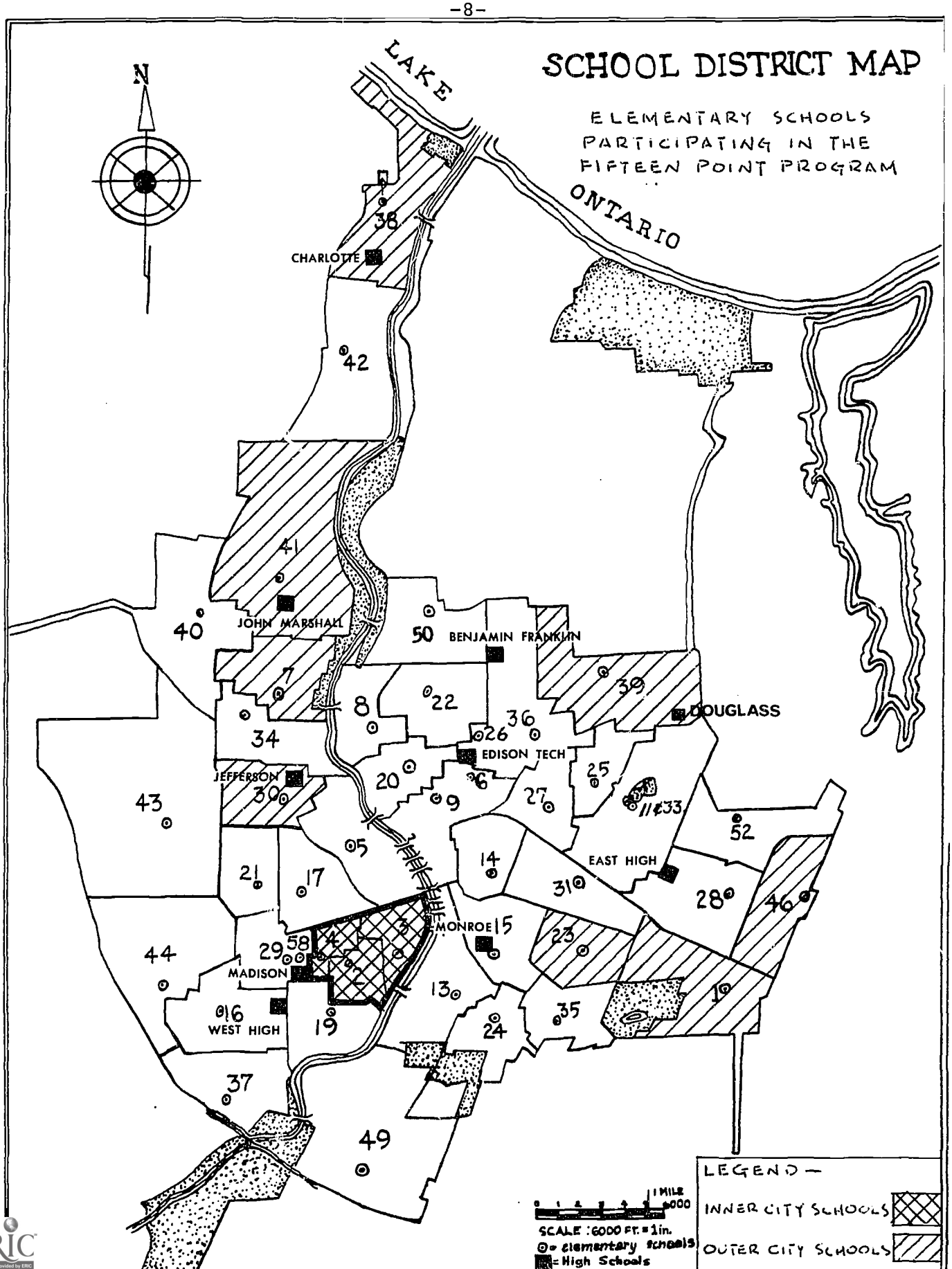
Elementary School	Enroll. (By Yr.) & %age of Ethnic Minority*							
	1966-67		1967-68		1968-69		1969-70	
	No.	%age	No.	%age	No.	%age	No.	%age
INNER CITY								
No. 2	947	97.9	811	81.3	807	80.8	884	80.6
No. 3	690	98.6	418	99.5	366	97.9	350	98.3
No. 4	752	98.0	725	98.4	660	98.4	647	99.5
OUTER CITY								
No. 1	50	11.1	96	21.4	88	23.5	79	21.3
No. 7	24	4.5	36	6.5	131	18.6	96	13.6
No. 23	61	13.2	96	19.8	99	20.6	81	16.4
No. 30	53	7.7	104	15.3	91	13.5	81	12.0
No. 38	49	6.6	78	10.5	62	8.8	87	12.9
No. 39	169	19.1	216	25.4	200	26.8	208	28.4
No. 41	19	2.5	83	10.5	99	12.2	82	10.7
No. 46	22	4.3	35	7.0	37	7.9	60	15.2

* Includes Negro, Spanish-surnamed, American Indian, and Oriental pupils (1969-70 Annual Statistical Report)

enrollments varied from approximately 7 to 28 percent for the experimental time span, although the 1966-67 school year records a range from 2.5 to 19.1 percent ethnic minority enrollees. The accompanying map shows the relationship of the major inner and outer city schools involved. Following sections describe more specifically how each of the participating schools became associated with a particular component of the Fifteen Point Plan.

COMPONENT ONE: COMPENSATORY EDUCATION

Initially, children in Grades 4-6 from Nathaniel Rochester School No. 3 were transferred to outer city receiving schools in which the percentage of black pupils was below the citywide average. In November 1966, Nathaniel Rochester School No. 3 had an enrollment that was 98.5 percent black. In addition, the results of the New York State Pupil Evaluation Program administered in October 1966 showed that 72 percent of the children entering first grade in School No. 3 could be defined as educationally disadvantaged, i.e. 72 percent of the children at this grade level fell below satisfactory levels of readiness for instruction in Reading, as defined by the New York State Education Department. Of the elementary schools in the City School District in the Fall of 1966, this school had the highest percentage of black children as identified by the Annual Ethnic Census and the highest percentage of educationally disadvantaged children as defined by the New York State Pupil Evaluation Program.


SCHOOL DISTRICT MAP
ELEMENTARY SCHOOLS PARTICIPATING IN THE FIFTEEN POINT PROGRAM
N
LAKE ONTARIO
CHARLOTTE
JOHN MARSHALL
BENJAMIN FRANKLIN
DOUGLASS
EDISON TECH
JEFFERSON
EAST HIGH
MONROE
MADISON
WEST HIGH
38
42
41
40
50
7
8
22
39
34
26
36
30
20
6
9
27
25
11
33
43
52
5
14
21
17
31
28
46
44
29
58
15
23
13
19
24
35
10
16
37
49
1 MILE
SCALE : 6000 Ft. = 1 in.
= elementary schools
= High Schools
LEGEND —
INNER CITY SCHOOLS
OUTER CITY SCHOOLS

By transferring children in Grades 4-6 from School No. 3 to outer city receiving schools, space was made available to reduce class size sharply in the remaining grades, K-3. In addition to achieving class size of approximately fifteen pupils or less to one teacher for September 1967, a teacher aide, frequently indigenous to the neighborhood, was employed for each classroom. Furthermore, under ESEA Title I assistance, a reading teacher was added to the staff of School No. 3 to instruct classroom teachers in using remedial procedures and to help individual pupils overcome special reading handicaps.

Instructionally, School No. 3 followed the "regular" program of study. However as an inner city school, it obtained additional special projects and services made available through ESEA Title I appropriations. These included the Artmobile, Intercity Audiovisual Bus Trips, Educational Media, and a fulltime elementary school counselor. Moreover, pupils attending this school were eligible to apply for voluntary transfer under the Open Enrollment Plan.

COMPONENT TWO: INTEGRATION

As previously stated, the City School District has operated an Open Enrollment Program since February 1964. For the 1969-70 school year, nine schools located in the inner city sent more than 1200 pupils to outer city schools. Under the Expanded Open Enrollment Program, children attending schools with heavy concentrations of white pupils were given the opportunity to transfer in a reverse direction to Clara Barton School No. 2, a relatively new school located on Reynolds Street in the inner city and serving pupils in the district adjacent to the School No. 3 district. In 1966, School No. 2 had an enrollment which was 97.9 percent black. In addition, the percentage of first graders identified as educationally disadvantaged according to the New York State Readiness Tests was 33 percent (Fall 1966). Although this percentage was not as high as the 72 percent enrolled at School No. 3, it was significantly higher than the 23 percent used to define minimum competency on a statewide basis.

As of March 1970, a total of 228 white pupils from K-6 had voluntarily transferred into Clara Barton School No. 2, causing the ethnic census to show white pupils comprising almost 20 percent of the school's population. Moreover, results from the 1969 administration of the Readiness Tests given to Grade 1 pupils showed 33 percent scoring below the minimum competency level again.

The instructional program at School No. 2 was expanded for both the integrated and segregated pupils in several ways. One provided instruction in beginning French for intermediate grade pupils. Specialists in Far Eastern Studies, Reading, Mathematics, and Science were added to enrich the daily offerings and to provide greater individualized experiences for all pupils. School No. 2 was also involved in Project BEACON, the local segment of the State Project ABLE. Specifically, Project BEACON was concerned with the development of materials and programs in the areas of language arts, Negro history,

cultural enrichment, and ego development for primary level pupils. In addition, other services available to all School No. 2 pupils through ESEA Title I or Urban Education Aid included the Artmobile, Educational Media, Intercity Audiovisual Bus Trips, Counseling, and an Art Action Center staffed by a fulltime art teacher. Thus, white pupils and black pupils shared enriched educational experiences in classes whose sizes approximated the city mean of slightly over 26 pupils per class.

In order to accommodate the pupils transferred into Clara Barton School No. 2, it was necessary for resident pupils to transfer to other schools on a voluntary basis. During the 3-year time span, approximately 400 students attended schools outside of the School No. 2 district. Many of the schools that received School No. 2 pupils also received intermediate grade pupils from the School No. 3 area. All such schools enrolled pupils from other racially imbalanced schools under the Open Enrollment Program. The additional services and personnel available to schools receiving School No. 3 pupils as described previously, became available as well to those schools enrolling pupils from Clara Barton School No. 2.

For the final year presented in this report (1969-70 school year), three schools, specifically Schools No. 7, 39, and 50, exceeded 100 pupils enrolled under the Open Enrollment Transfer Plan. Among the other twenty schools involved in accepting open enrollment transferees, the number of pupils enrolled varied from eight to ninety-two pupils at different age/grade levels. Thus, for many schools, the combined effects of the Open Enrollment and the Fifteen Point Programs afforded a degree of integration that otherwise would not have occurred.

With the school year 1968-69 came the establishment of integrated Kindergarten classes at Dag Hammarskjold School No. 6. As specified in the Fifteen Point Plan, Schools No. 2 and 6 were designated as schools into which reverse open enrollment pupils were to flow. During the 1969-70 school year, additional Kindergarten classes were integrated; this coupled with the continuation of the previous year's enrollees, effected partial integration at both the Kindergarten and Grade One levels. Since attempts to assess differential achievement gains for early primary pupils proved virtually fruitless in previous efforts, neither the kindergarteners nor first graders of School No. 6 were included in the data analysis.

COMPONENT THREE: SEGREGATION

As described earlier for this report, segregation represents the status at schools having predominantly ethnic minority enrollees (although it may also refer to any dominant grouping) and refers to those schools located near the central part of the city. Classes at these schools tended to have nearly all black pupils who usually were

members of low income families. In addition, low parental educational attainment frequently characterized the families from which children came. Data recorded for Schools No. 2, 3, and 4 reflect the ethnic enrollments as illustrated in Table 2.

TABLE 2

AVERAGE ENROLLMENT, CLASS SIZE, AND PERCENTAGE OF ETHNIC MINORITY BEFORE AND AFTER IMPLEMENTATION OF THE FIFTEEN POINT PLAN AT SELECTED INNER CITY SCHOOLS

	1962-63 -- 1966-67			1967-68 -- 1969-70		
	5-Year Means			3-Year Means		
School	No. of Students	Class Size	% of Ethnic Minority	No. of Students	Class Size	% of Ethnic Minority
No. 2	976	28.8	94.04	1034	28.5	80.90
No. 3	692	28.9	95.90	383	18.1	98.56
No. 4	784	28.9	95.12	672	27.2	98.76

In addition to evaluating pupil achievement in compensatory segregated classes, pupils enrolled in segregated classes at two elementary schools are described and assessed in later sections of the report. One of the schools not included in the Fifteen Point Program, George Mather Forbes School No. 4, was used as a control for the Hawthorne effect, a halo type effect demonstrated in many social experiments wherein participation alone produces an effect independent of the treatment. Essentially, School No. 4 was selected to represent the typical inner city segregated school.

Instructionally, School No. 4 followed the regular course of study. Class size approximated the city mean. Those ESEA Title I services that were available to the nearby Schools No. 2 and 3 such as the Artmobile, Intercity Audiovisual Bus Trips, Educational Media, and counseling services by request, were provided to School No. 4. In addition, a reading teacher helped classroom teachers develop special techniques for instructing educationally disadvantaged children and provided individual attention to pupils having unusual reading difficulties. Also, pupils attending School No. 4 were eligible to transfer to other schools under the Open Enrollment Plan. Thus in many ways, School No. 4 resembled Schools No. 2 and 3 in ethnic makeup and curricular services. However, implementation of program emphases differed from the two major treatments (compensatory and enrichment experiences) highlighted in this study. Moreover, during one year various stresses were identified at this school that were somewhat unusual and may have affected pupil outcomes adversely. (Additional mention and amplification of this occur later in the report.)

The other school, School No. 2, was the Experimental School highlighted in the study. In addition to establishing integrated classes achieved by the voluntary transfer of outer city white children to this predominantly black inner city school, a portion of School No. 2's enrollment remained in segregated classes for instructional purposes. However, all children could interact socially before, after, and at selected times during the school hours. In addition, all of the enrichment activities and special services available at the school were available to these pupils as well. Thus, two segregated control type classes were used in comparing pupils' achievement, attendance, and perceived social growth and work habits.

CAUTIONS TO BE EXERCISED

This final report of a 3-year longitudinal study may tempt some readers to oversimplify relevant factors and, thus, infer or draw erroneous conclusions. The author feels compelled to urge those who read and interpret this report to do so with discretion.

Admittedly, many features for implementing an appropriate experimental design were omitted in this study. Such desirable features as random assignment of pupils, large numbers of participants (50 or more at each level), and treatment constancies relating to teacher characteristics such as random assignment, instructional procedures, and materials or methods were precluded in its implementation. In effect, if the ideal circumstances had been prerequisite to data analysis, it is quite probable that no data would have been gathered. Stated more succinctly, inherent features associated with the study may have confounded the outcomes. The extent of their influence is not known.

Variables that operated one year were not necessarily in effect during the other years. For example, teacher turnover at both the experimental and receiving schools has had unknown consequences. Table 3 shows the total number of teachers by year leaving the school and the percentage of turnover for the schools involved during the 3-year period. Median turnover for all schools was .28; for the inner city schools it was somewhat higher at .31; while the combined outer city schools recorded .255. Whether this difference represents a symptom or cause is obscure; but, without question, these losses, plus the loss of other key personnel, must alter the personality of the instructional groups.

During both the 1968-69 and 1969-70 school years, Project BEACON embarked upon a program emphasizing the development of reading skills through photography. This pioneering effort has shown the achievement of one classroom of pupils at the Experimental School to excel that of those in two other District schools. Two pupils from this experimental group are included in the sample drawn to test the relative achievement of those racially segregated at the Experimental School vs. their comparison group.

TABLE 3

TEACHING STAFF TURNOVER AT FIFTEEN POINT PROGRAM SCHOOLS
THREE YEARS: 1967-68 -- 1969-70

School	Year								
	1967-68			1968-69			1969-70		
	Total Teachers	Leaving No.	%	Total Teachers	Leaving No.	%	Total Teachers	Leaving No.	%
No. 1	15	4	.25	13	2	.15	13	4	.31
No. 2	36	14	.39	36	14	.39	37	5	.14
No. 3	25	5	.20	21	5	.24	18	6	.33
No. 4	26	8	.31	25	7	.28	23	12	.52
No. 7*	18	4	.22	24	8	.33	26	8	.31
No. 23	17	4	.24	17	7	.41	18.5	5	.27
No. 30	22.5	6	.26	23	5	.22	23	2	.09
No. 38	25	7	.28	23.5	5	.20	24.5	5	.20
No. 39	31	11	.35	26	8	.31	29	8	.28
No. 41	28.5	9	.31	28	10	.36	28	8	.29
No. 46	17	4	.24	16.5	4	.23	16.5	0	-

* Relocated to a larger facility 1968-69

The reduction in funds available for health office assistants may have affected the outcomes. If in fact these services do have an effect upon the students, the absence of health office assistants will be reflected in student achievement, attendance, and enthusiasm for education.

These examples offered are only three of the several which may reflect the difference a year makes. Though one is correct in assuming that a subsequent year should relate to earlier ones, pupils, programs, emphases, staffing, funds, and other factors do not stand still for the researcher.

CHAPTER THREE

RESEARCH DESIGN

THE RESEARCH QUESTIONS

The scope of the Fifteen Point Program affected to some degree the activities and personnel of at least twenty-two elementary schools. However, the evaluation of the program's effectiveness is restricted to the involvement of pupils at eleven schools. Samples were derived from those schools having the largest overall group participation and were categorized into one of the following group classifications:

Segregation: Classes comprised largely of ethnic minority pupils in an inner city school setting where class size approximated the citywide mean of 26.7. In this study, Schools No. 2 and 4 are designated as those containing classes of this description. While remediation was available at both, the numbers and types of specific programs varied to some degree with School No. 2 having more than School No. 4.

Compensatory: Classes comprised largely of ethnic minority pupils in an inner city setting where specific efforts were made to reduce the number of children in each classroom so as to increase the opportunities for closer pupil-teacher contact. Special remedial and supportive emphases attempted to reduce pupil learning problems (School No. 3).

Integration-In: Classes comprised of both white and ethnic minority children in an inner city school setting. Class size approximated the citywide mean (26.7) and specially funded remedial and enrichment services were available (School No. 2).

Integration-Out: Classes comprised of ethnic minority children joining with resident white children in numerous outer city school settings where class sizes approximated the citywide mean (26.7). Though some remedial services were provided in the receiving schools, they were not as extensive as those found at Schools No. 2 and 3.

Within the context of these four categories, nine questions served as the framework of this study. The first six questions were posed in the first interim report while the remaining three were included as supplementary research interests of later reporting efforts.

QUESTION 1. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS ATTENDING A SCHOOL WITH SMALL CLASS SIZE (AVERAGE K-3 = 15-18) COMPARE WITH THAT OF SIMILARLY SEGREGATED BLACK PUPILS IN SCHOOLS HAVING LARGER CLASS SIZES, I.E. EXPERIMENTAL SCHOOL AND CONTROL SCHOOL? (THE SPECIALLY FUNDED SUPPLEMENTS DIFFERED FOR EACH OF THE THREE SCHOOLS.)

QUESTION 2. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS ATTENDING A SCHOOL WITH SMALL CLASS SIZE (AVERAGE K-3 = 15-18) COMPARE WITH

THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL AND

THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS?

QUESTION 3. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL COMPARE WITH THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS?

QUESTION 4. HOW DOES THE ACHIEVEMENT OF WHITE PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL COMPARE WITH THE ACHIEVEMENT OF A SIMILAR GROUP OF WHITE PUPILS IN OUTER CITY SCHOOLS?

QUESTION 5. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES COMPARE WITH

THE ACHIEVEMENT OF PUPILS IN CLASSES ALMOST COMPLETELY BLACK IN ENROLLMENT WITHIN THE SAME SCHOOL AND

THAT OF SEGREGATED PUPILS IN A NEIGHBORING SCHOOL?

QUESTION 6. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS COMPARE WITH THE ACHIEVEMENT OF BLACK PUPILS IN CLASSES ALMOST COMPLETELY BLACK AT TWO INNER CITY SCHOOLS?

QUESTION 7. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN AN INNER CITY SCHOOL COMPARE WITH THAT OF

WHITE PUPILS IN THE SAME INTEGRATED SETTING

BLACK PUPILS IN THE SAME SETTING WHO HAD ONE YEAR OF INTEGRATION SUCCEEDING PRIOR SEGREGATED SCHOOL EXPERIENCES AND

WHITE PUPILS WHO ATTENDED THEIR OWN NEIGHBORHOOD SCHOOLS?

QUESTION 8. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS, SEGREGATED IN AN INNER CITY SCHOOL WHICH HAS SPECIALLY FUNDED REMEDIAL AND ENRICHMENT SERVICES ALONG WITH PURPOSEFULLY INTEGRATED CLASSES, COMPARE WITH THAT OF BLACK PUPILS IN SEGREGATED CLASSES OF SIMILAR SIZE AND HAVING REMEDIAL SERVICES, BUT FEWER SPECIALLY FUNDED ENRICHMENT EXPERIENCES AND RELATIVELY NO INTEGRATED OPPORTUNITIES?

QUESTION 9. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS HAVING TWO YEARS OF SEGREGATION AND ONE YEAR OF INTEGRATION IN AN INNER CITY SCHOOL WHICH HAS SPECIALLY FUNDED REMEDIAL AND ENRICHMENT SERVICES ALONG WITH INTEGRATED CLASSES COMPARE WITH THAT OF

BLACK SEGREGATED PUPILS IN THE SAME SCHOOL AND

BLACK PUPILS IN ANOTHER SCHOOL IN SEGREGATED CLASSES OF SIMILAR SIZE AND HAVING REMEDIAL SERVICES, BUT FEWER SPECIALLY FUNDED ENRICHMENT EXPERIENCES AND RELATIVELY NO INTEGRATED OPPORTUNITIES?

DATA ANALYSIS

Whereas the previous interim report used a matched group technique in establishing the statistical design, this report relies upon using all possible participants. Sample sizes after two or three years of pupil involvement in the Fifteen Point Program necessitated this choice. If groups being compared appeared to be similar on pretest mean reading scores, standard deviations, score ranges, and skewness, t-tests were computed for the statistical analysis. This was the preferred analysis. When a satisfactory pretest match did not happen to occur, a one-way analysis of covariance was substituted.

The preference for the former design was dictated by the desire to compare groups comprised of pupils who had had the same growth rates prior to the experiment. This was needed to permit relatively unambiguous interpretation of the results or outcomes. The use of covariance analysis was relegated to a secondary or back-up procedure because interpretation of results derived from it are limited by the implication [or often neglected assumption] that factors which resulted in the pre differences between the groups were not relevant during the period of the study. This assumption is likely to be false in pre-post studies of this type, particularly when covariance adjusted post differences are in the same direction as the pre differences. In this case, there is too much likelihood that within-group regression lines are heterogenous; this cannot be safely ignored.

To elaborate further, participants, whether involved in the Fifteen Point Program for two or three years, were classified into groups according to the categories Segregation, Compensatory, Integration-In, and Integration-Out. Pupils who had had two or three successive years of involvement in the specific category were included in the analysis. In one instance, groups having two years of segregated experiences, succeeded by one year of integrated experiences, were also analyzed.

The statistical treatment applied to the test data provided a test of significance between group mean differences. For those groups that were similar on pretests, t-tests for independent samples were computed on the pretest variables. In a few instances when the original groups were not similar, matched subgroups were formed and matched group t-tests were computed for the posttest variables. Where the independent t-test between the means of the groups from the matching variable provided a t greater than one or if the experimental differences were opposite to any residual difference obtained on the matching variable, a one-way analysis of covariance was substituted for the group t-test on the post variable.

In each instance, the null hypothesis formulated and tested for statistical significance was that there would be no difference between the two groups with respect to achievement, attendance, and perceived growth as measured by the various devices. Moreover, for this study, significance is accepted at the .05 level of confidence.

The detailed results of the data analyses found in the appendix, have been summarized in tabular form for each question. The tables show the pre-posttest means, standard deviations, numbers of pupils, and t or F according to significance. Attendance, presented as the number of full days absent (with approximately 181 days possible), social growth, and work habits have also been analyzed. It must be remembered that the latter two measures are subject to the variations of interpretation and judgment normally associated with subjective teacher appraisals and should be viewed accordingly. In addition, for the remaining sections of this report, reference to the names of specific schools is minimized. The report refers to the Experimental School, the school having compensatory education, the Control School, and outer city schools. Complementing those school and program descriptions found under component titles, the following explanations are offered:

> School No. 2 was designated as the Experimental School. Highlighted for its inner city integrated classrooms resulting from the Reverse Open Enrollment of white pupils, the instructional program was further distinguished by features designed to provide enrichment experiences. Project BEACON, focusing at the primary level, had an undetermined effect on the study at hand. The Major Achievement Program (M.A.P.) provided accellerated experiences to Grade 5 and 6 pupils; therefore, none of these pupils was included among any groups selected for the research. Neither these programs nor their effects upon the whole school program are known and are beyond the scope of this study.

School No. 3 was the facility offering compensatory emphases; i.e. ancillary, remedial, and supportive services. Virtually totally segregated in enrollment, it was represented in this study by pupils from Grades 2 and 3. Only those pupils who had been enrolled at School No. 3 for two or three continuous years and who had complete pre and post achievement test data were included in the various analyses.

School No. 4, the Control School, though racially comparable to School No. 3, did not have the amount of programs and services allotted both Schools No. 2 and 3. Two groups of pupils were selected for data analysis. One group represented the primary level (completing Grade 3 in June 1970) and the other group the intermediate level (Grade 5,1970). The assumption was made that the achievement of these two groups generally represented the achievement of the School No. 4 student body per se.

Hereafter, unless designated, the groups referred to in the appendices are comprised of black pupils. Moreover, it is important that the reader view each table as a part of a whole, a series of comparisons which, if taken out of context, may result in an inaccurate perspective.

EVALUATION MEASURES

In order to provide answers to the questions raised in a preceding section, pupil achievement at Grades 2-6 was compared by utilizing data from standardized tests. Participants involved for three years were pretested at the beginning of the 1967-68 school year while the 2-year participants were given pretests in October 1968--near the beginning of the 1968-69 school year. All posttests were administered in late May 1970--near the end of the school year. A description of the tests given at each grade level follows.

KINDERGARTEN

Peabody Picture Vocabulary Test: (Pretest, Form A)

The PEABODY PICTURE VOCABULARY TEST is designed to provide an estimate of a subject's verbal capacity by measuring his hearing vocabulary. The test may be administered in a group or individual situation with subjects from the preschool level through high school. The Kindergarten pupils in this study were tested individually by a staff member from the Division of Planning and Research.

The Peabody test booklet, which contains four clearly drawn pictures per page, is placed before the subject. The examiner pronounces a word from a list of stimulus items and asks the subject to indicate in whatever manner he chooses (either verbally or by pointing) which one of the four pictures corresponds to the spoken word. The examiner records the response and both subject and examiner proceed to the next page and item respectively.

The limits of the test differ for each individual. A "basal" is established when eight consecutive correct responses have been made; the "ceiling" is reached when a subject makes six errors in eight consecutive responses. A pupil's raw score is the number of pictures correctly identified; maximum possible raw score is 150 points.

GRADE ONE

New York State Readiness Tests: (Pretest, Form A)

Word Meaning (16 items) -- measures vocabulary; pupil selects from three pictures the one that illustrates the word the examiner expresses

Listening (16 items) -- measures the ability to comprehend phrases and sentences instead of individual words

Matching (14 items) -- measures visual perception involving recognition of similarities

Alphabet (16 items) -- measures the ability to recognize lower case letters of the alphabet

Numbers (26 items)--measures general number knowledge including achievement in number vocabulary, counting, ordinal numbers, meaning of fractional parts, recognition of forms, telling time, and the use of numbers in simple problems

Copying (14 items) -- measures a combination of visual, perceptual, and motor control skills

The total maximum possible raw score for these tests is 102 points.

Metropolitan Achievement Tests: Primary I Battery (Posttest Form C)

Word Knowledge (35 items) -- measures sight vocabulary or word recognition ability

Reading (45 items) -- measures sentence comprehension (13 items) and paragraph comprehension (32 items)

Arithmetic Concepts and Skills (63 items) -- measures mastery of basic numerical and quantitative concepts that are essential to understanding beginning stages of arithmetic, ability to solve verbal problems, and ability to perform addition and subtraction exercises

The scores from each of the subtests are reported independently.

GRADE TWO

Metropolitan Achievement Tests: Primary II Battery
(Pretest, Form A; Posttest Form C)

Word Knowledge (37 items) -- measures word recognition and understanding; first seventeen items are of the picture-vocabulary type in which the child demonstrates his recognition of a word by associating it with a picture; for the last twenty items a stimulus word is presented in written form and the child demonstrates his understanding by choosing from among four alternative written responses

Reading (51 items) -- measures the ability to comprehend sentences (13 items) and to comprehend materials of paragraph length (38 items)

Arithmetic (72 items) -- Part A, Concepts and Problem Solving, (42 items) provides a comprehensive measure of the child's mastery of basic numerical and quantitative concepts essential to understanding early stages of arithmetic and ability to solve verbal problems. Part B, Computation, (30 items) computational exercises that cover addition and subtraction skills ranging in difficulty from basic addition facts to subtraction of three-place numbers

The scores from each subtest are reported independently.

GRADE THREE

Reading Test for New York State Elementary Schools: Grade 3
(Pretest, Form A; Posttest, Form B)

Part I - Word Recognition (25 items) -- measures how well a pupil can distinguish the correct word from others with which it may be confused; teacher reads the test word, uses it in a sentence, and then repeats the word; pupil indicates which one of five possible words was read by the teacher

Part II - Reading Comprehension (28 items) -- consists of a series of short reading selections, each of which is followed by a number of questions; gives a measure of the pupil's ability to read a paragraph and understand it; questions test the ability to recognize the central thought of the selection, to answer questions based on specific statements, to make inferences about the content of the selection, and to discover the meaning of a word from its context

The total maximum possible raw score for the reading test is 53 points.

Arithmetic Test for New York State Elementary Schools: Grade 3 (Pretest, Form A; Posttest, Form B)

Part I - Computation (15 items) -- measures performance on fundamental operations in arithmetic

Part II - Problem Solving (20 items) -- measures ability to solve arithmetic problems

Part III - Concepts (20 items) -- measures understanding of basic principles and ideas in arithmetic

The total maximum possible raw score for this test is 55 points.

GRADES FOUR AND FIVE

Iowa Tests of Basic Skills: Form 4

The IOWA TESTS provide for comprehensive measurement in the fundamental areas of vocabulary, reading, mechanics of correct writing, methods of study, and arithmetic. The specific tests used in this study were:

Vocabulary (Grade 4 - 38 items; Grade 5 - 43 items) -- measures knowledge of word meaning

Reading Comprehension (Grade 4 - 68 items; Grade 5 - 74 items) -- measures understanding of what is read

Arithmetic Concepts (Grade 4 - 36 items; Grade 5 - 42 items)-- measures understanding of arithmetic terms and operations

Arithmetic Problem Solving (Grade 4 - 27 items; Grade 5 - 29 items) -- measures problem solving ability

The raw scores for each of the subtests were reported independently for pupils at both grade levels.

GRADE SIX

Reading Test for New York State Elementary Schools: Grade 6 (Pretest, Form A; Posttest, Form B)

Part I - Word Recognition (30 items) -- measures how well a pupil can distinguish the correct word from others with which

it may be confused; teacher reads the test word, uses it in a sentence, and then repeats the word; pupil indicates which one of five possible words was read by the teacher

Part II - Reading Comprehension (36 items) -- consists of a series of short reading selections, each of which is followed by a number of questions; gives a measure of the pupil's ability to read a paragraph and understand it; questions test the ability to recognize the central thought of the selection, to answer questions based on specific statements, to make inferences about the content of the selection, and to discover the meaning of a word from its context.

The total maximum possible raw score for the reading test is 66 points.

Arithmetic Test for New York State Elementary Schools: Grade 6 (Pretest, Form A; Posttest, Form B)

Part I - Computation (20 items) -- measures performance on fundamental operations in arithmetic

Part II - Problem Solving (20 items) -- measures ability to solve arithmetic problems

Part III - Concepts (20 items) -- measures understanding of basic principles and ideas in arithmetic

The total maximum possible raw score for this test is 60 points.

ADDITIONAL INFORMATION

Data on attendance and teacher perception of social growth and work habits were also gathered for pupils of this study in Grades 2-6. Attendance was studied in terms of the total number of days absent for the school year as reported on pupil cumulative records. Only absences for the 1968-69 and 1969-70 school years were reported. Perception of social growth and work habits were reduced to a numerical scale on which 1 is considered "excellent" and 5 is "poor." In each instance the number represents the teacher's yearend appraisal of the pupil's social growth and work habits for either the 1968-69 or 1969-70 school years.

Thus, posttest analyses are of two types. The achievement measures reflect pupils' outcomes near the close of the 1969-70 school year, i.e. their cumulative achievement results after two or three years of direct participation in one of the program components. The attendance and teacher perceptions were analyzed for all three years of the study. However, they were reported separately in the first interim report and were not retained for each pupil involved. Therefore, the attendance and teacher perception of social growth and work habits are presented as summaries for each of the final two years the time span under surveillance. It is important for the reader keep this distinction in mind as he interprets the analyses presented in Chapter Four and the appendices.

CHAPTER FOUR

DATA ANALYSIS

DATA PRECIPITATED BY THE EVALUATION DESIGN

QUESTION 1. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS ATTENDING A SCHOOL WITH SMALL CLASS SIZE (COMPENSATORY EDUCATION AVERAGE K-3 = 15-18) COMPARE WITH THAT OF SIMILARLY SEGREGATED BLACK PUPILS IN SCHOOLS HAVING LARGER CLASS SIZES, I.E. EXPERIMENTAL SCHOOL AND CONTROL SCHOOL? (THE SPECIALLY FUNDED SUPPLEMENTS DIFFERED FOR EACH OF THE THREE SCHOOLS.)

SUMMARY: COMPENSATORY ED. VS. SEGREGATION (EXP.)

		2-YEAR PARTICIPANTS					3-YEAR PARTICIPANTS				
		No. of Pupils		No. of Post Anal-	No. & Dir Sig Diffs		No. of Pupils		No. of Post Anal-	No. & Dir Sig Diffs	
Gr	Criterion	Comp	Seg (Exp)	yses	Comp	Seg (Exp)	Comp	Seg (Exp)	yses	Comp	Seg (Exp)
2	Ach.	25	12	4	0	1					
	Attend.	21	12	2	0	0					
	Tch.Per.	21	12	4	0	0					
3	Ach.						38	15	5	2	0
	Attend.						31	11	2	0	0
	Tch.Per.						29	13	4	1	0
TOTALS:											
	Ach.	25	12	4	0	1	38	15	5	2	0
	Attend.	21	12	2	0	0	31	11	2	0	0
	Tch.Per.	21	12	4	0	0	29	13	4	1	0

SUMMARY: COMPENSATORY ED. VS. SEGREGATION (CON.)

3	Ach.						38	39	5	5	0
	Attend.						31	22	2	0	0
	Tch.Per.						29	21	4	0	0
TOTALS:											
	Ach.						38	39	5	5	0
	Attend.						31	22	2	0	0
	Tch.Per.						29	21	4	0	0

SUMMARY QUESTION ONE

Data were available for two major comparisons between pupils enrolled at the Compensatory School and segregated pupils at the Experimental School. Specifically, it involved two year participants at Grade Two and three year participants at Grade Three. However, the number of pupils having complete data and enrolled in segregated classes at the Experimental School was reduced by pupil mobility to 12 and 15 respectively.

Because the two year participating groups differed in their pretest mean readiness results, data were covaried. Of the four posttest achievement measures analyzed, one was statistically significant (Computation) and favored pupils enrolled in the segregated classes at the Experimental School. Of the five subtest analyses involving the achievement of three year participants, two were significant (Word Recognition and Computation). For these latter analyses, pupils enrolled in classes at the Compensatory School were higher than the comparison group enrolled in segregated classes at the Experimental School. In addition, teacher perception of social growth during the second of the three years studied favored compensatory pupils at a significant level; however, this same difference was not apparent in the teacher perceptions analyzed during the final school year (1969-70).

When three year Grade Three pupils in compensatory education classes were compared with similar pupils enrolled in classes at the Segregated Control School, all five subtests on the New York State Elementary School Tests Grade 3 were significantly higher for the compensatory group. No differences were noted in attendance and teacher perceptions.

Thus, the evidence assembled convincingly supports achievement gains for pupils attending compensatory type classes when compared with those enrolled at the same level in the Segregated Control School after three years of involvement. Two of five subtests favored compensatory pupils when they were contrasted with their three year counterparts in segregated classes at the Experimental School; and one of fourteen analyses involving achievement scores favored pupils enrolled in segregated classes - this latter result having occurred at the Experimental School and involved two year participants.

NOTE: Mentioned earlier in this report and cited in the 1969 Interim Report are the precautions necessary in viewing the Control School. Unusual circumstances during the 1968-69 school year resulted in pressures that may have affected the staff and pupils adversely. Later in this chapter, data assembled from the New York State Pupil Evaluation Program are presented and offer insight regarding the extent to which these pressures affected pupil growth and achievement. To elaborate briefly, two additional control type schools were identified and pupil achievement data were contrasted both within and among the various schools featured in the Fifteen Point Program (Control, Compensatory, and Experimental Schools). These data are intended to be supplemental and potentially qualifying rather than substitutional evidence.

QUESTION 2. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS ATTENDING A SCHOOL WITH SMALL CLASS SIZE (AVERAGE K-3 = 15-18) COMPARE WITH

THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL AND

THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS?

SUMMARY: COMPENSATORY ED. VS. INTEGRATION-IN

		2-YEAR PARTICIPANTS					3-YEAR PARTICIPANTS				
		No. of Pupils		No. of Post Anal-	No. & Dir Sig Diffs		No. of Pupils		No. of Post Anal-	No. & Dir Sig Diffs	
Gr	Criterion	Comp	Int-In	yses	Comp	Int-In	Comp	Int-In	yses	Comp	Int-In
2	Ach.	25	9	4	0	1					
	Attend.	21	9	2	0	0					
	Tch.Per.	21	9	4	0	0					
3	Ach.						38	17	5	0	0
	Attend.						31	16	2	0	0
	Tch.Per.						29	16	4	0	0
TOTALS:											
	Ach.	25	9	4	0	1	38	17	5	0	0
	Attend.	21	9	2	0	0	31	16	2	0	0
	Tch.Per.	21	9	4	0	0	29	16	4	0	0

SUMMARY: COMPENSATORY ED. VS. INTEGRATION-OUT

2	Ach.	25	19	4	0	0					
	Attend.	21	19	2	0	0					
	Tch.Per.	21	18	4	0	0					
3	Ach.						38	18	5	0	0
	Attend.						31	11	2	0	0
	Tch.Per.						29	11	4	0	0
TOTALS:											
	Ach.	25	19	4	0	0	38	18	5	0	0
	Attend.	21	19	2	0	0	31	11	2	0	0
	Tch.Per.	21	18	4	0	0	29	11	4	0	0

SUMMARY QUESTION TWO

Of the nine analyses made with achievement test data involving Grades Two and Three participants who were enrolled for two and three years in compensatory education classes and those in integrated classes at the Experimental School, one outcome was significant at the .05 level of confidence. It was the Computation results and favored the nine pupils enrolled in the integrated classes for the two year time span. Essentially, the two year integrated participants at Grade Two recorded higher readiness scores at the beginning of first grade and despite covariance adjustment retained a lead that became evident at the end of Grade Two in computational skills as measured by the Metropolitan Achievement Test, Primary II, Form C. No significant achievement differences were revealed between the three year participants. Even though the integrated pupils had a faster developmental rate prior to pretesting, the rates appear similar during the experimental time span. Hence, for practical purposes it would appear that the achievement differences evidenced between the sixty-three black pupils representing compensatory type instruction and the twenty-six involved in integrated classes at the Experimental School are relatively few and inconsequential. Furthermore, no differences were evidenced in attendance or teacher perception of social growth and work habits for the majority of these students during the final two years of assessment.

When the same black pupils who were involved in compensatory education classes were compared with similar black pupils who voluntarily transferred to integrated outer city schools for two or three years of instruction, there were no significant differences in the nine achievement, the four attendance or the eight teacher perception analyses. In only one instance is a visual trend shown that approaches a finding and that occurred when the two year Grade Two Reading achievement analysis was made and favored the twenty-five compensatory pupils.

In conclusion, when data were analyzed for black pupils enrolled at an inner city school with small class size (compensatory education) and similar black pupils who were enrolled in integrated classes in an inner city Experimental School or an outer city setting, there were no major differences after two and three years of assessment.

QUESTION 3. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL COMPARE WITH THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS?

SUMMARY: INTEGRATION-IN VS. INTEGRATION-OUT

		2-YEAR PARTICIPANTS					3-YEAR PARTICIPANTS				
		No. of Pupils		No. of Post	No. & Dir Sig Diffs		No. of Pupils		No. of Post	No. & Dir Sig Diffs	
Gr	Criterion	Int-In	Int-Out	Analyses	Int-In	Int-Out	Int-In	Int-Out	Analyses	Int-In	Int-Out
2	Ach.	9	19	4	0	0					
	Attend.	9	19	2	0	0					
	Tch.Per.	9	18	4	0	0					
3	Ach.						16	18	5	0	0
	Attend.						15	11	2	0	0
	Tch.Per.						15	11	4	0	0
5	Ach.						15	12	4	0	0
	Attend.						13	8	2	1	0
	Tch.Per.						13	8	4	2	0
6	Ach.						24	13	4	2	0
	Attend.						20	9	2	0	0
	Tch.Per.						20	9	4	2	0
TOTALS:											
	Ach.	9	19	4	0	0	55	43	13	2	0
	Attend.	9	19	2	0	0	48	28	6	1	0
	Tch.Per.	9	18	4	0	0	48	28	12	4	0

SUMMARY QUESTION THREE

Data were available for four sets of black pupils enrolled in integrated classes at the inner city Experimental School and outer city schools. One set involved two year participants, who during the 1969-70 school year completed Grade Two; the other three sets were three year participants who had just completed Grades Three, Five or Six in their respective schools. For the two year participants, there were no statistically significant differences discerned on either pre or posttest measures when analyses were computed. In the thirteen achievement test analyses rendered for the three year participants that involved fifty-five pupils in integrated classes at the inner city

Experimental School and forty-three at outer city schools, there were two statistically significant outcomes. Both occurred for those pupils completing Grade Six and favored the pupils integrated at the Experimental inner city school. The two achievement areas in which the differences were evidenced are Word Recognition and Arithmetic Concepts. Analyses of teacher perceptions of three year participants revealed four significant differences. Each favored pupils integrated at the Experimental School.

In effect, the evidence from these analyses indicates that even though there were some differences in programming and staffing, there were relatively few significant differences between black pupils integrated in an inner city Experimental School and similar pupils enrolled in outer city schools. Those two achievement differences that appeared favored one grade at the inner city Experimental School; three other sets of comparisons involving 15 analyses were insignificant. Thus, it appears that participation in either group produces similar achievement reults; however, teachers at the Experimental School tended to perceive their pupils developing more positive social patterns and work habits.

QUESTION 4. HOW DOES THE ACHIEVEMENT OF WHITE PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL COMPARE WITH THE ACHIEVEMENT OF A SIMILAR GROUP OF WHITE PUPILS IN OUTER CITY SCHOOLS?

SUMMARY: INTEGRATION-IN (W) VS. INTEGRATION-OUT (W)

		2-YEAR PARTICIPANTS					3-YEAR PARTICIPANTS				
		No. of Pupils		No. of Post	No. & Dir Sig Diffs		No. of Pupils		No. of Post	No. & Dir Sig Diffs	
Gr	Criterion	Int-In	Int-Out	Analyses	Int-In (W)	Int-Out (W)	Int-In	Int-Out	Analyses	Int-In (W)	Int-Out (W)
2	Ach.	21	18	4	2	0					
	Attend.	22	18	2	0	0					
	Tch.Per.	22	18	4	0	1					
3	Ach.						21	25	5	0	0
	Attend.						15	17	2	0	0
	Tch.Per.						15	17	4	1	0
4	Ach.	7	9	4	0	0					
	Attend.	6	7	2	0	0					
	Tch.Per.	6	7	4	0	0					
5	Ach.	10	14	4	0	0	9	9	4	0	0
	Attend.	10	14	2	0	1	9	9	2	0	0
	Tch.Per.	10	14	4	1	0	9	9	4	0	0
6	Ach.	10	8	4	0	0	14	14	5	0	0
	Attend.	11	8	2	0	2	12	12	2	0	0
	Tch.Per.	11	8	4	0	0	12	13	4	0	1
TOTALS:											
	Ach.	48	49	16	2	0	44	48	14	0	0
	Attend.	49	47	8	0	3	36	38	6	0	0
	Tch.Per.	49	47	16	1	1	36	39	12	1	1

SUMMARY QUESTION FOUR

Sample size for each of the constituent groups of white pupils involved precludes strong inferences from the statistical analyses. Seen in perspective, however, the evidence shows no major differences between the 92 white pupils who voluntarily attended an integrated inner city Experimental School and a similar group comprised of 97 white pupils who attended their neighborhood schools. Those achievement

trends which are evidenced and/or implied from the analyses favor the pupils attending the inner city school. Specifically, two year participants who recently completed Grade Two at the Experimental School scored significantly higher in Word Knowledge and Reading as demonstrated on the Metropolitan Achievement Test (Primary II). Of three significant findings, attendance favored the neighborhood school pupils while the teacher perceptions were evenly distributed.

In effect, analysis of results for two and three year white participants corroborates earlier findings, i.e. there are no major differences in achievement and teacher perceptions for children attending an outer city neighborhood school and those enrolled at the inner city Experimental School. Attendance, however, seemed slightly better for those pupils enrolled at the neighborhood school.

QUESTION 5. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES COMPARE WITH

THE ACHIEVEMENT OF PUPILS IN CLASSES ALMOST COMPLETELY BLACK IN ENROLLMENT WITHIN THE SAME SCHOOL AND

THAT OF SEGREGATED PUPILS IN A NEIGHBORING SCHOOL?

SUMMARY: INTEGRATION-IN VS. SEGREGATION (EXP.)

		2-YEAR PARTICIPANTS				3-YEAR PARTICIPANTS				
		No. of Pupils		No. of Post	No. & Dir Sig Diffs		No. of Pupils		No. of Post	No. & Dir Sig Diffs	
Gr	Criterion	Int-In	Seg (Exp)	Anal-yses	Int-In	Seg (Exp)	Int-In	Seg (Exp)	Anal-yses	Int-In	Seg (Exp)
3	Ach.						16	15	5	2	0
	Attend.						15	11	2	0	0
	Tch.Per.						15	13	4	2	0
4	Ach.						15	16	3	0	0
	Attend.						11	14	2	1	0
	Tch.Per.						11	13	4	0	1
5	Ach.						15	11	4	0	0
	Attend.						13	11	2	0	0
	Tch.Per.						13	11	4	2	0
6	Ach.						24	26	4	1	0
	Attend.						20	18	2	0	0
	Tch.Per.						20	18	4	0	0
TOTALS:											
	Ach.						70	68	16	3	0
	Attend.						59	54	8	1	0
	Tch.Per.						59	55	16	4	1

SUMMARY: INTEGRATION-IN VS. SEGREGATION (CON.)

Gr	Criterion	2-YEAR PARTICIPANTS				3-YEAR PARTICIPANTS				
		No. of Pupils		No. of Post Anal-yses	No. & Dir Sig Diffs	No. of Pupils		No. of Post Anal-yses	No. & Dir Sig Diffs	
		Int-In	Seg (Con)		Int-In	Seg (Con)	Int-In	Seg)Con)		Int-In	Seg (Con)
3	Ach.						17	39	5	5	0
	Attend.						16	22	2	0	0
	Tch.Per.						16	22	4	0	0
5	Ach.						15	36	4	1	0
	Attend.						15	36	1	0	0
	Tch.Per.						15	36	2	0	0
TOTALS:											
	Ach.						32	75	9	6	0
	Attend.						31	58	3	0	0
	Tch.Per.						31	58	6	0	0

SUMMARY QUESTION FIVE

The achievement, attendance and teacher perceived data available for comparing black pupils in integrated classes with similar pupils in segregated classes of the same school involved three year participants who had recently completed Grades Three, Four, Five or Six. A total of 70 pupils was involved in integrated classes and 68 in segregated classes. Readily apparent in the tabularized summary is the fact that at least one of the variables analyzed is significant at each grade level. Furthermore, the total clearly favors the integrated pupils (8:1). Three of the eight significant differences involved achievement measures namely Word Recognition and Arithmetic Concepts for Grade Three, and Arithmetic Concepts at Grade Six. The one difference favoring segregated pupils was recorded at the Grade Five pretest Arithmetic Computation measure. Since no specific computational skill was measured on the posttests, it is not possible to ascertain the effects of this difference. By inference, however, it appears that whatever pretest gain the pupils in the segregated classes had, by posttest time it was gone and, in truth, the pupils in integrated classes had forged ahead. This is shown in the mean scores recorded for Arithmetic Concepts and Problem Solving as measured by the Iowa Tests of Basic Skills. Thus, the evidence tends to support integrated educational exchanges over exchanges involving all black classes. Moreover, the trend seems to concentrate at the primary level.

For the second part of the research question, i.e. integrated classes at the Experimental School vs. segregation in the Control School, of the nine posttest achievement analyses, six were significantly greater for the integrated pupils. Attendance and teacher perceptions were similar for both groups. Thus, the evidence assembled supports the integrated groups rather conclusively.

QUESTION 6. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS COMPARE WITH THE ACHIEVEMENT OF BLACK PUPILS IN CLASSES ALMOST COMPLETELY BLACK AT TWO INNER CITY SCHOOLS?

SUMMARY: INTEGRATION-OUT VS. SEGREGATION (EXP.)

		2-YEAR PARTICIPANTS					3-YEAR PARTICIPANTS				
		No. of Pupils		No. of Post	No. & Dir Sig Diffs		No. of Pupils		No. of Post	No. & Dir Sig Diffs	
Gr	Criterion	Int-Out	Seg (Exp)	Anal-yses	Int-Out	Seg (Exp)	Int-Out	Seg (Exp)	Anal-yses	Int-Out	Seg (Exp)
2	Ach.	* 8	* 8	4	0	1					
	Attend.	8	8	2	0	0					
	Tch.Per.	8	8	4	0	0					
3	Ach.						18	15	5	3	0
	Attend.						11	11	2	0	1
	Tch.Per.						11	13	4	0	0
4	Ach.	9	15	4	0	0					
	Attend.	9	16	2	0	0					
	Tch.Per.	9	16	4	0	0					
5	Ach.	9	11	4	0	0	12	11	4	0	0
	Attend.	9	8	2	0	0	8	11	2	0	1
	Tch.Per.	9	8	4	0	0	8	11	4	0	0
6	Ach.						13	26	4	0	0
	Attend.						9	18	2	0	0
	Tch.Per.						9	18	4	0	0
TOTALS:											
	Ach.	26	34	12	0	1	43	52	13	3	0
	Attend.	26	32	6	0	0	28	40	6	0	2
	Tch.Per.	26	32	12	0	0	28	42	12	0	0

* A subgroup selected specifically for matching purposes and thus not representative of the total Grade Two sample used elsewhere

SUMMARY: INTEGRATION-OUT VS. SEGREGATION (CON.)

Gr	Criterion	2-YEAR PARTICIPANTS					3-YEAR PARTICIPANTS				
		No. of Pupils		No. of Post Anal-yses	No. & Dir Sig Diffs		No. of Pupils		No. of Post Anal-yses	No. & Dir Sig Diffs	
		Int-Out	Seg (Con)		Int-Out	Seg (Con)	Int-Out	Seg (Con)		Int-Out	Seg (Con)
3	Ach.						18	39	5	5	0
	Attend.						11	22	2	0	0
	Tch.Per.						11	22	4	0	0
5	Ach.						12	36	4	1	0
	Attend.						12	36	1	0	0
	Tch.Per.						12	36	2	0	2
TOTALS:											
	Ach.						30	75	9	6	0
	Attend.						23	58	3	0	0
	Tch.Per.						23	58	6	0	2

SUMMARY QUESTION SIX

Again, sample size jeopardizes conclusive inferences from the data analysis. Significant differences in achievement were recorded at two grade levels (2,3) when black pupils integrated at outer city schools were compared with similar pupils segregated at the Experimental School. At the Grade Two level in Arithmetic Computation (two year participants) segregated pupils were significantly higher when their results were covaried and compared with a special sampling of pupils in integrated classes at outer city schools. However, for the three year participants who completed Grade Three in 1969-70, the integrated-out pupils were significantly higher in Word Recognition, Reading, and Arithmetic Problem Solving. For the latter group, sample size was not as delimiting as it was for the two year participants. In addition, two significant differences in attendance were noted with each favoring those pupils enrolled at their neighborhood schools.

When the two representative groups (three year participants at Grades 3,5) of the Control School were compared with similar groups enrolled at outer city schools, the achievement outcomes were more definite. Of the nine posttest analyses, six were significant; each favored the integrated pupils. However, the two significant findings regarding teacher perception, favored the segregated pupils at the Control School.

Viewed in perspective, it would appear that the evidence gathered

from these analyses supports greater achievement gains for black pupils integrated at outer city schools. In addition, the gains appear more clearly for those involved at the primary level (5 of 6) as opposed to those involved at the intermediate level. Attendance and teachers' appraisals of social growth and work habits seem more positive at the two segregated neighborhood school settings. However, these latter mentioned differences have limited utility because of reduced sample sizes.

QUESTION 7. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN AN INNER CITY SCHOOL COMPARE WITH THAT OF

WHITE PUPILS IN THE SAME INTEGRATED SETTING

BLACK PUPILS IN THE SAME SETTING WHO HAD ONE YEAR OF INTEGRATION SUCCEEDING PRIOR SEGREGATED SCHOOL EXPERIENCES AND

WHITE PUPILS WHO ATTENDED THEIR OWN NEIGHBORHOOD SCHOOLS?

SUMMARY: INTEGRATION-IN (B) VS. INTEGRATION-IN (W)

		2-YEAR PARTICIPANTS				3-YEAR PARTICIPANTS				
		No. of Pupils		No. of Post	No. & Dir Sig Diffs		No. of Pupils		No. of Post	No. & Dir Sig Diffs	
Gr	Criterion	Int-In (B)	Int-In (W)	Anal-yses	Int-In (B)	Int-In (W)	Int-In (B)	Int-In (W)	Anal-yses	Int-In (B)	Int-In (W)
3	Ach.						*14	* 10	5	0	0
	Attend.						13	7	2	0	0
	Tch.Per.						13	7	4	0	0
4	Ach.						15	18	4	0	3
	Attend.						11	17	2	1	0
	Tch.Per.						11	17	4	0	0
6	Ach.						*13	* 12	5	0	0
	Attend.						12	11	2	1	0
	Tch.Per.						12	11	4	0	0
TOTALS:											
	Ach.						42	40	14	0	3
	Attend.						36	35	6	2	0
	Tch.Per.						36	35	12	0	0

* A subgroup selected specifically for matching purposes and thus not representative of the total Grade Three and Grade Six samples used elsewhere

SUMMARY: INTEGRATION-IN VS. TWO YEARS SEGREGATION FOLLOWED BY ONE YEAR INTEGRATION-IN (SSI; EX?.)

		2-YEAR PARTICIPANTS					3-YEAR PARTICIPANTS				
		No. of Pupils		No. of Post	No. & Dir Sig Diffs		No. of Pupils		No. of Post	No. & Dir Sig Diffs	
Gr	Criterion	Int-In	SSI (Exp)	Anal-yses	Int-In	SSI (Exp)	Int-In	SSI (Exp)	Anal-yses	Int-In	SSI (Exp)
3	Ach.						17	19	5	0	0
	Attend.						16	15	2	0	0
	Tch.Per.						16	15	4	0	0
5	Ach.						15	10	4	0	0
	Attend.						13	9	2	0	0
	Tch.Per.						13	9	4	1	0
TOTALS:											
	Ach.						32	29	9	0	0
	Attend.						29	24	4	0	0
	Tch.Per.						29	24	8	1	0

SUMMARY: INTEGRATION-IN (B) VS. INTEGRATION-OUT (W)

		2-YEAR PARTICIPANTS					3-YEAR PARTICIPANTS				
		No. of Pupils		No. of Post	No. & Dir Sig Diffs		No. of Pupils		No. of Post	No. & Dir Sig Diffs	
Gr	Criterion	Int-In (B)	Int-Out (W)	Anal-yses	Int-In (B)	Int-Out (W)	Int-In (B)	Int-Out (W)	Anal-yses	Int-In (B)	Int-Out (W)
3	Ach.						*14	* 12	5	0	1
	Attend.						13	9	2	0	0
	Tch.Per.						13	9	4	0	0
4	Ach.						15	11	3	0	2
	Attend.						11	10	2	0	0
	Tch.Per.						11	10	4	0	2
6	Ach.						*13	* 12	5	0	0
	Attend.						12	10	2	0	0
	Tch.Per.						12	11	4	0	0
TOTALS:											
	Ach.						42	35	13	0	3
	Attend.						36	29	6	0	0
	Tch.Per.						36	30	12	0	2

subgroup selected specifically for matching purposes and thus ot representative of the total Grade Three and Grade Six samples used elsewhere

SUMMARY QUESTION SEVEN

To compare the scholastic growth of black pupils with white pupils both of whom had shared in integrated classes at the Experimental School for comparable time periods, data for three year participants at Grades Three, Four, and Six were analyzed. Two groups (Grade Three and Six) were selected specifically to match closely on pretest reading results, i.e. score ranges, means, and standard deviations. Of their ten posttest achievement subtests, four attendance comparisons and eight teacher perceptions analyzed, one was significant. It was attendance during the 1969-70 school year and favored the black pupils attending their neighborhood school; all other outcomes were quite similar for the two groups. The Grade Four comparisons analyzed between black pupils and white pupils who had comparable integrated experiences, revealed similar achievement pretest ratings but posttest results clearly favoring the white pupils enrolled at the Experimental School. These white pupils were significantly higher in Reading, Arithmetic Concepts, and Problem Solving as reflected on the Iowa Test of Basic Skills. For this same comparison set, attendance was again more positive for those black pupils attending their neighborhood school.

With the third year of involvement in the Fifteen Point Program, a new type of group emerged. Specifically, it involved pupils who had been attending segregated classes at the Experimental School for two years, and then during the third year, transferred to integrated classes (SSI). Only those with higher achievement scores were selected. Moreover, this type of transfer was effected at both the third and fifth grade levels. These black pupils were compared with similar groups of black pupils who had been enrolled in integrated classes for three consecutive years. No significant differences were evidenced in achievement and attendance data for the 13 analyses computed. One of the eight analyses dealing with teacher perceptions was significant; it was work habits and favored the integrated pupils.

The third part of the Research Question examines the outcomes of black pupils enrolled in integrated classes at the Experimental School with white pupils enrolled in integrated classes at their neighborhood schools. Participants at three grade levels were assessed (Grades 3, 4, 6). Of the thirteen achievement posttests analyzed, three were statistically significant; each revealed higher achievement gains for the white pupils. (Arithmetic Problem Solving - Grade 3; Vocabulary and Reading - Grade 4). Generally, these white pupils reflected higher pretest scores and tended to remain higher on posttest outcomes even after covarying for pretest differences. In one instance, the significantly higher Arithmetic Concept pretest favoring the white pupils was not significant on the corresponding posttest measure three years later (Grade 6 comparisons). In effect, when the pretest results were more nearly alike for the two groups analyzed, their posttest outcomes tended to be similar also.

In summary, the evidence revealed in comparing black pupils who had integrated school experiences at their neighborhood school with white pupils who had integrated experiences at either their neighborhood school or the inner city Experimental School was "mixed."

In a majority of instances their achievement outcomes were similar; in others they were not. When the two white groups were matched closely on pretest achievement outcomes with black pupils integrated at the inner city Experimental School, there were no significant differences on 20 of 24 posttest measures. The four significant outcomes favored the white pupils. When select groups of black pupils who had previous segregated instructional experiences succeeded by one year of integrated experiences were compared with similar black pupils who had integrated experiences for a three year period, there were no significant differences.

QUESTION 8. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS, SEGREGATED IN AN INNER CITY SCHOOL WHICH HAS SPECIALLY FUNDED REMEDIAL AND ENRICHMENT SERVICES ALONG WITH PURPOSEFULLY INTEGRATED CLASSES, COMPARE WITH THAT OF BLACK PUPILS IN SEGREGATED CLASSES OF SIMILAR SIZE AND HAVING REMEDIAL SERVICES, BUT FEWER SPECIALLY FUNDED ENRICHMENT EXPERIENCES AND RELATIVELY NO INTEGRATED OPPORTUNITIES?

SUMMARY: SEGREGATION (EXP.) VS. SEGREGATION (CON.)

		2-YEAR PARTICIPANTS				3-YEAR PARTICIPANTS				
		No. of Pupils		No. of Post Anal-	No. & Dir Sig Diffs		No. of Pupils		No. of Post Anal-	No. & Dir Sig Diffs	
Gr	Criterion	Seg (Exp)	Seg (Con)	yses	Seg (Exp)	Seg (Con)	Seg (Exp)	Seg (Con)	yses	Seg (Exp)	Seg (Con)
3	Ach.						15	39	5	0	0
	Attend.						11	22	2	1	0
	Tch.Per.						13	22	4	0	0
5	Ach.						11	36	4	0	0
	Attend.						11	36	1	0	0
	Tch.Per.						11	36	2	0	1
TOTALS:											
	Ach.						26	75	9	0	0
	Attend.						22	58	3	1	0
	Tch.Per.						24	58	6	0	1

SUMMARY QUESTION EIGHT

Because two representative samples were identified at the segregated Control School, one at the primary and the other at the intermediate level, and because the number of segregated classes at the Experimental School was reduced for each succeeding year, sample size was less than desired for the time span under study. Two levels of pupils were appraised, i.e. Grades 3 and 5 pupils.

Different from the second interim report which revealed greater achievement gains for the primary level participants at the Experimental School, analysis of achievement data for pupils after three years of participation in their respective settings revealed no significant differences. For the two differences noted among the other variables, attendance favored the Grade Three participants at the Experimental School for the 1968-69 school year, while teacher perception of social growth was more favorable for the Grade Five pupils of the Control School during the 1969-70 school year. Generally, from the data analyzed, it appears that there are almost no measurable differences after three years of involvement for the pupils who were enrolled in the two different segregated type classes.

QUESTION 9. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS HAVING TWO YEARS OF SEGREGATION AND ONE YEAR OF INTEGRATION IN AN INNER CITY SCHOOL WHICH HAS SPECIALLY FUNDED REMEDIAL AND ENRICHMENT SERVICES ALONG WITH INTEGRATED CLASSES COMPARE WITH THAT OF

BLACK SEGREGATED PUPILS IN THE SAME SCHOOL

BLACK PUPILS IN ANOTHER SCHOOL IN SEGREGATED CLASSES OF SIMILAR SIZE AND HAVING REMEDIAL SERVICES, BUT FEWER SPECIALLY FUNDED ENRICHMENT EXPERIENCES AND RELATIVELY NO INTEGRATED OPPORTUNITIES?

SUMMARY: TWO YEARS SEGREGATION FOLLOWED BY ONE YEAR INTEGRATION-IN (SSI; EXP.) VS. SEGREGATION (EXP.)

		2-YEAR PARTICIPANTS					3-YEAR PARTICIPANTS				
		No. of Pupils		No. of Post Anal-	No. & Dir Sig Diffs		No. of Pupils		No. of Post Anal-	No. & Dir Sig Diffs	
Gr	Criterion	SSI (Exp)	Seg (Exp)	yses	SSI (Exp)	Seg (Exp)	SSI (Exp)	Seg (Exp)	yses	SSI (Exp)	Seg (Exp)
3	Ach.						19	15	5	3	0
	Attend.						15	11	2	0	0
	Tch.Per.						15	13	4	0	0
5	Ach.	8	11	4	0	0	10	11	4	0	0
	Attend.	7	8	2	0	0	9	11	2	0	0
	Tch.Per.	7	8	4	0	0	9	11	4	1	0
TOTALS:											
	Ach.	8	11	4	0	0	29	26	9	3	0
	Attend.	7	8	2	0	0	24	22	4	0	0
	Tch.Per.	7	8	4	0	0	24	24	8	1	0

SUMMARY: TWO YEARS SEGREGATION FOLLOWED BY ONE YEAR INTEGRATION-IN (SSI; EXP.) VS. SEGREGATION (CON.)

Gr	Criterion	2-YEAR PARTICIPANTS				3-YEAR PARTICIPANTS				
		No. of Pupils		No. of Post Anal-yses	No. & Dir Sig Diffs		No. of Pupils		No. of Post Anal-yses	No. & Dir Sig Diffs	
		SSI (Exp)	Seg (Con)		SSI (Exp)	Seg (Con)	SSI (Exp)	Seg (Con)		SSI (Exp)	Seg (Con)
3	Ach.						19	39	5	5	0
	Attend.						15	22	2	0	0
	Tch.Per.						15	22	4	0	0
5	Ach.						10	36	4	2	0
	Attend.						10	36	1	0	0
	Tch.Per.						10	36	2	0	0
TOTALS:											
	Ach.						29	75	9	7	0
	Attend.						25	58	3	0	0
	Tch.Per.						25	58	6	0	0

SUMMARY QUESTION NINE

Again, sample size delimits some of the implications derived from data analysis. Of the thirteen achievement analyses computed for pupils in segregated classes and those who had segregated classes followed by a year of integrated instructional experience at the Experimental School, three were significantly different. Each was evidenced by the third grade children who had the integrated experiences. In addition, the one significant finding relating to teacher perception (social growth) favored the pupils who had the integrated experiences at the fifth grade level.

When the three year participants (SSI) were compared with their counterparts at the Control School, seven of nine posttest achievement analyses were significant. Each supported the gains recorded by the children who had shared in integrated instructional experiences at the Experimental School.

However, it is important to remember that many of the participants identified as SSI were those who had scored somewhat higher on the previous year's posttest reading measure. Therefore, an overt selective procedure that introduced them to integrated classes may have influenced their achievement outcomes for the 1969-70 school year. Thus it would be somewhat presumptuous to draw inferences or implications from the analyses, and any conclusions derived must be tentative at this time.

RESULTS DERIVED FROM THE NEW YORK STATE PUPIL EVALUATION PROGRAM

BACKGROUND INFORMATION

The purpose for including this section in the report is two-fold. In the first place, reference has been made earlier to an observation that unusual pressures surfaced at the Segregated Control School during the 1968-69 school year...one year after the Fifteen Point Program was implemented. What effect, if any, did this pressure have upon pupil growth and achievement? To confront this dilemma, two additional control type schools were identified. Their pupil achievement results as shown by the New York State Pupil Evaluation Program were compared with the primary Control School, the Compensatory School, and the Experimental School. In addition, comparisons were made between the outcomes of the same students at two different times, i.e. Grades 1-3 (1967-69) and Grades 3-6 (1966-69).

The second purpose for including this portion is to grapple with the effects of confounding issues such as pupil mobility, variability of the students involved, and change effects over time. Data analyses in the preceding section of this report distinguished differences among/between comparison groups, but did not reflect the levels at which the participating groups functioned relative to any normative groups. Analysis of the results from the New York State Pupil Evaluation Program affords the possibility of achieving both objectives.

Data reduction of the results from the Pupil Evaluation Program involved both descriptive and inferential procedures. Although the purpose of this testing emphasis was intended to evaluate the impact of the Elementary and Secondary Education Act - Title I allocations, it enables local districts to compare their schools' achievement outcomes with the statewide norming population. Data reported show the percentages of pupils below minimum competency (23rd percentile) by individual school along with school means for each respective grade (Grades 1, 3, 6, and 9 selected pupils). These tests were normalized in the Fall of 1966 and have been administered at the beginning of each succeeding school year (Grade 1 discontinued after 1968). Thus, data available for this report extend from 1966-69. Moreover, whenever feasible, these tests were used as an integral part of the Fifteen Point Evaluation design (see Chapter Three).

In addition to graphs that present both global and explicit examinations of assorted New York State Pupil Evaluation data, t-tests were computed on pupil percentile rankings. These latter are tabularized in Appendix J for each of the components assessed; summaries are presented in Tables 4 and 5 of this chapter. The two kinds of graphs require further clarification. Specifically, the participating schools' results are presented in terms of the percentage of pupils who scored below minimum competency (23rd percentile and lower) in a particular grade and the grade's mean raw scores converted to percentiles. These data were obtained for two

periods of time, i.e. at or before the year the Fifteen Point Program was initiated and two and three years later. Stated practically, the percentage below minimum competency and school mean percentiles were examined for first and third graders for the Fall of 1967 and 1966 respectively and again two or three years later when these same children were tested as third or sixth grade enrollees in the Fall of 1969 (the most recent time from which data were available).

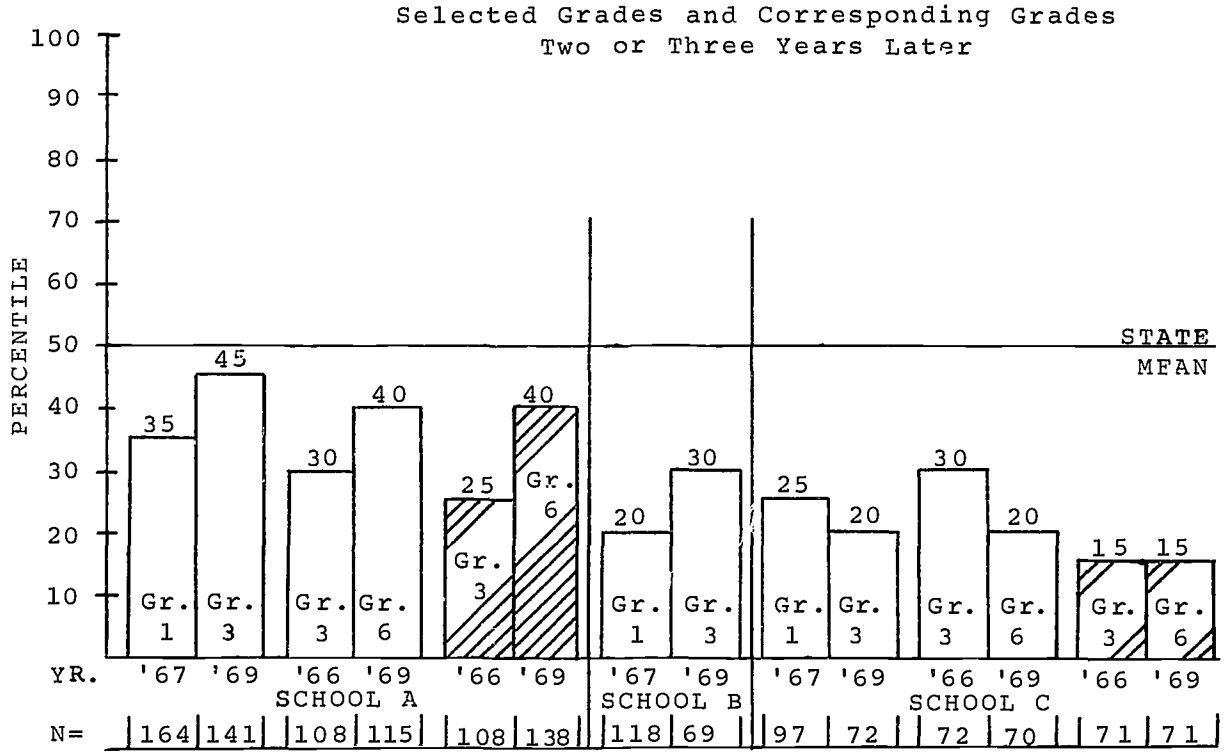
Figures 1 and 2 reflect the "trends" for each of the component schools under surveillance in global terms, i.e. all available data were used at each grade level in each school. Figures 1A and 2A, on the other hand, present pre-post results of only those pupils who were involved in the treatment activities for the first two of the three years of the Fifteen Point time span. One further delimiting aspect is noteworthy. Because the Fall 1969 testing results are the most recent available, the Grade 6 pupils tested then were in Grade 3 during the 1966-67 school year -- one year before the Fifteen Point Program. Therefore, the treatment effects for them are really confined to two rather than the desired three years. In short, the effects or changes resulting from their Grade 3 (segregated) experiences are included in the total assessment. However, if necessary precaution regarding the appraisal of New York State Pupil Evaluation data is maintained, the additional evidence presented here will complement the analyses described earlier in this chapter.

COMPONENT SCHOOLS (FIGURES 1, 1A)

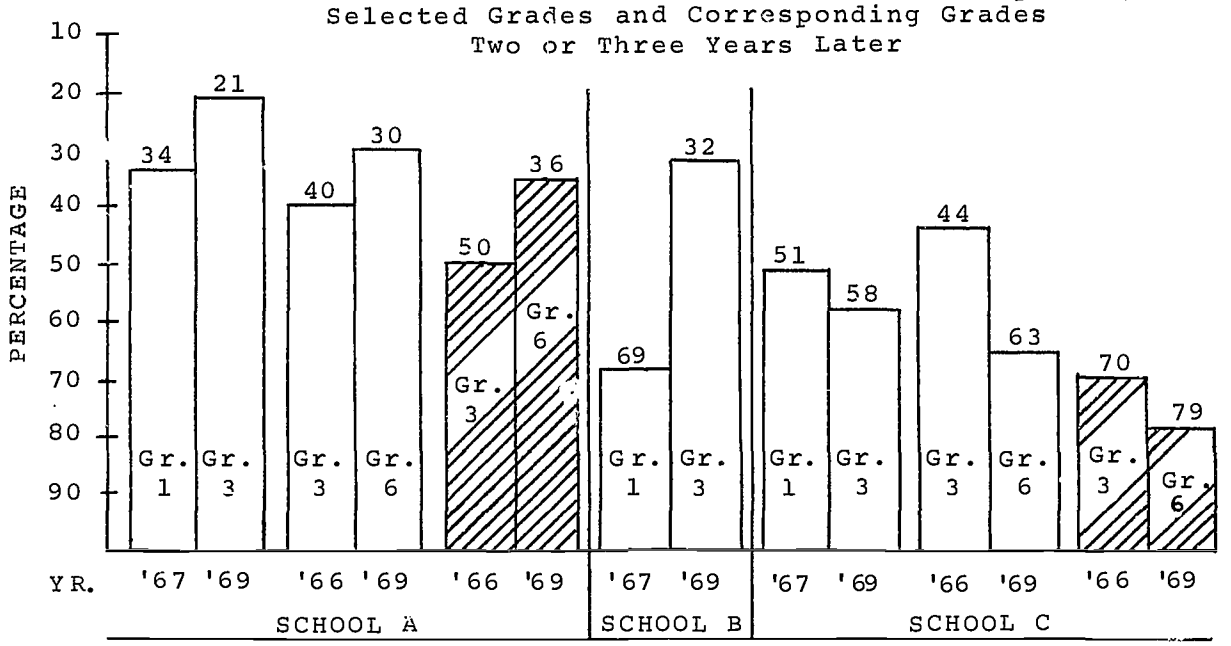
When the Pupil Evaluation Program results are examined, as they are provided by the State Education Department, the data for the Experimental School reveal the percentage of pupils below minimum competency in reading decreasing from 34 percent to 21 percent over the first two years of the Fifteen Point Program. This compares favorably with the state norm of 23 percent. This same favorable trend was also evident for the school mean percentile which reveals a ten percentile increase to within five percentiles of the State norm (50th percentile). This trend was replicated in the Grades 3-6 comparisons for a three year period in reading and arithmetic. Overall, the groups tested demonstrated a positive movement of 40 percent to 30 percent in reading and 50 percent to 36 percent in arithmetic in terms of the percentage scoring below minimum competency as well as concomitant increases in school mean ranking, i.e. to within ten percentile points of the State norm.

When the percentile scores of the total subtests of pupils who attended the Experimental School for the intervals Grades 1-3 and 3-6 are analyzed more closely, a different view is revealed. To clarify, if the pupils were progressing at the pace normally expected, they would be at or near the same percentile ranking for both pre and posttest measures, except possibly some regression toward the mean. In effect, tests of significance should reveal no significant differences between mean percentiles; if they had moved ahead, significant results would favor posttest rankings.

FIGURE 1 COMPONENT SCHOOLS: School Mean Percentile at Selected Grades and Corresponding Grades Two or Three Years Later



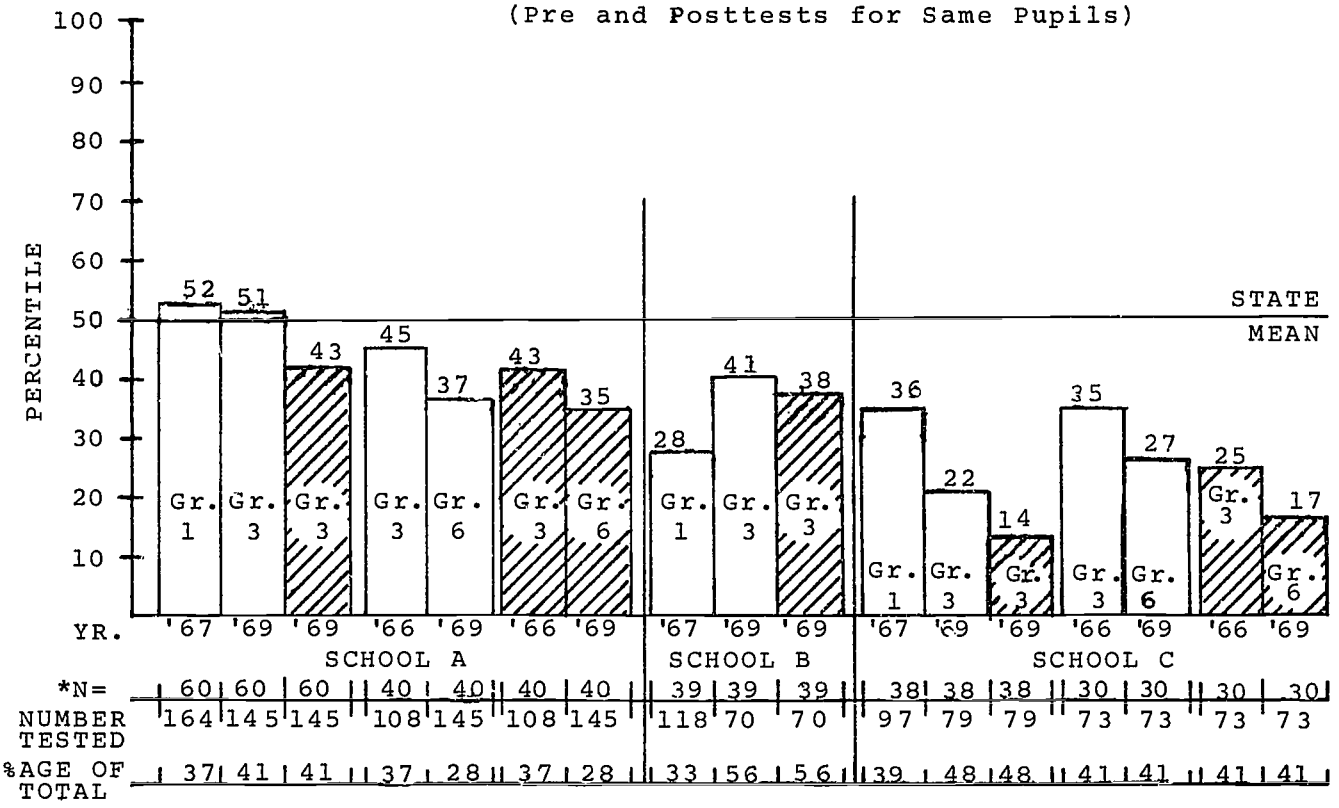
COMPONENT SCHOOLS: Percentage Below Minimum Competency at Selected Grades and Corresponding Grades Two or Three Years Later



A - Experimental School
B - Compensatory School
C - Segregated Control School

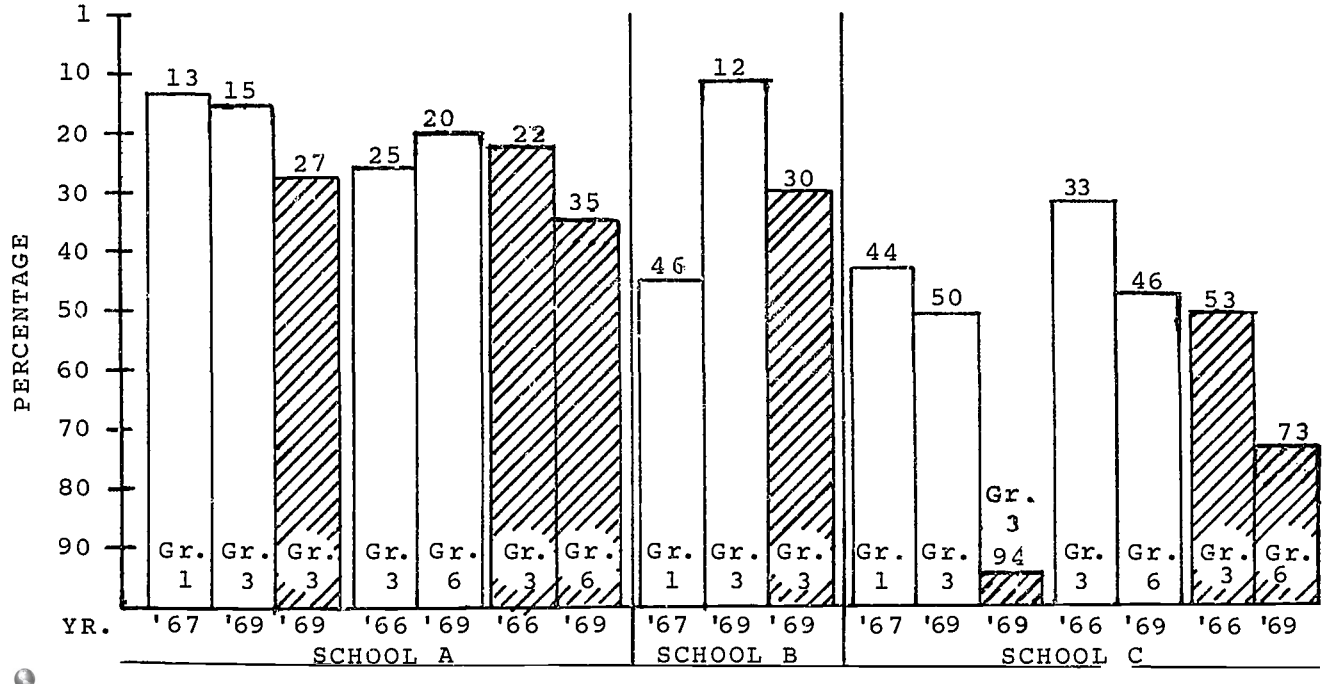
READING
ARITHMETIC

FIGURE 1A COMPONENT SCHOOLS: School Mean Percentile
(Pre and Posttests for Same Pupils)



*N adjusted for correlated t-test

COMPONENT SCHOOLS: Percentage Below Minimum Competency
(Pre and Posttests for Same Pupils)



A - Experimental School
B - Compensatory School
C - Segregated Control School

READING ARITHMETIC

When t-tests were computed for the sixty first to third graders and the forty third to sixth graders who had complete data and who were enrolled at the Experimental School for two and three years respectively (Figure 1A and Appendix J, Table 2), three of the four analyses were significant. Pretest rankings were higher in all three instances; only readiness and reading percentile rankings retained their relative standings. In short, these pupils enrolled at the Experimental School who had complete data tended to regress from Grade 1 to 3 in arithmetic skills as measured by the Grade 3 PEP tests. Regression was even more apparent for those pupils who were enrolled in the Grade 3-6 level. Significant pretest differences for the latter group were evidenced in both reading and arithmetic percentile rankings.

For the Compensatory School, data were relevant for pupils from 1967-69, i.e. those progressing through Grades 1-3 only. Considerable decreases in the precentage of pupils below minimum competency levels are noted in Figure 1A (on the previous page). Specifically, 46 percent of these children were below minimum competency at the beginning of Grade 1 and only 12 percent in reading and 30 percent in arithmetic skills were still below minimum competency at the beginning of Grade 3. Both posttest measures were significantly higher when t-tests were computed. Thus, it appears that the compensatory emphasis had marked effects upon reducing the achievement "lag" that characterizes educationally disadvantaged children as they progress through the elementary grades. Moreover, when pretest comparisons were made between first grade pupils at the Compensatory School and those attending the Experimental and Control Schools, those enrolled at the Compensatory School scored lowest on the readiness pretest measures (Appendix J, Table 1).

Graphs for the Segregated Control School reflected a negative trend in both the global (Figure 1, Page 42) and correlated (Figure 1A, Page 43) outcomes. Mean percentile scores were well below the 50th percentile and the percentage of pupils scoring below minimum competency increased during the two and three year intervals examined. Subsequent correlated t-test analyses revealed that the degree of regression was significant at the .05 level of confidence.

In summary, the analysis of New York State Pupil Evaluation Program results for the component schools yields evidence supporting two tentative inferences.

1. The pupils attending the three schools; i.e. Experimental, Compensatory, and Control, were not as similar in scholastic readiness skills as originally presumed. Pupils attending the Compensatory School tended to score lower on the pretest readiness measure, significantly lower than those at the Experimental School and lower (but not significantly) than the pupils at the Control School.

2. On the posttest measures, pupils at the Compensatory School were significantly higher than their counterparts at the Control School and close (lower, but not significantly) to their comparative group at the Experimental School.

Thus, it appears that treatment effects for the two year interval resulted in greater relative achievement gains for pupils participating in the compensatory educational emphasis.

EIGHT OUTER CITY SCHOOLS PARTICIPATING IN THE FIFTEEN POINT PROGRAM

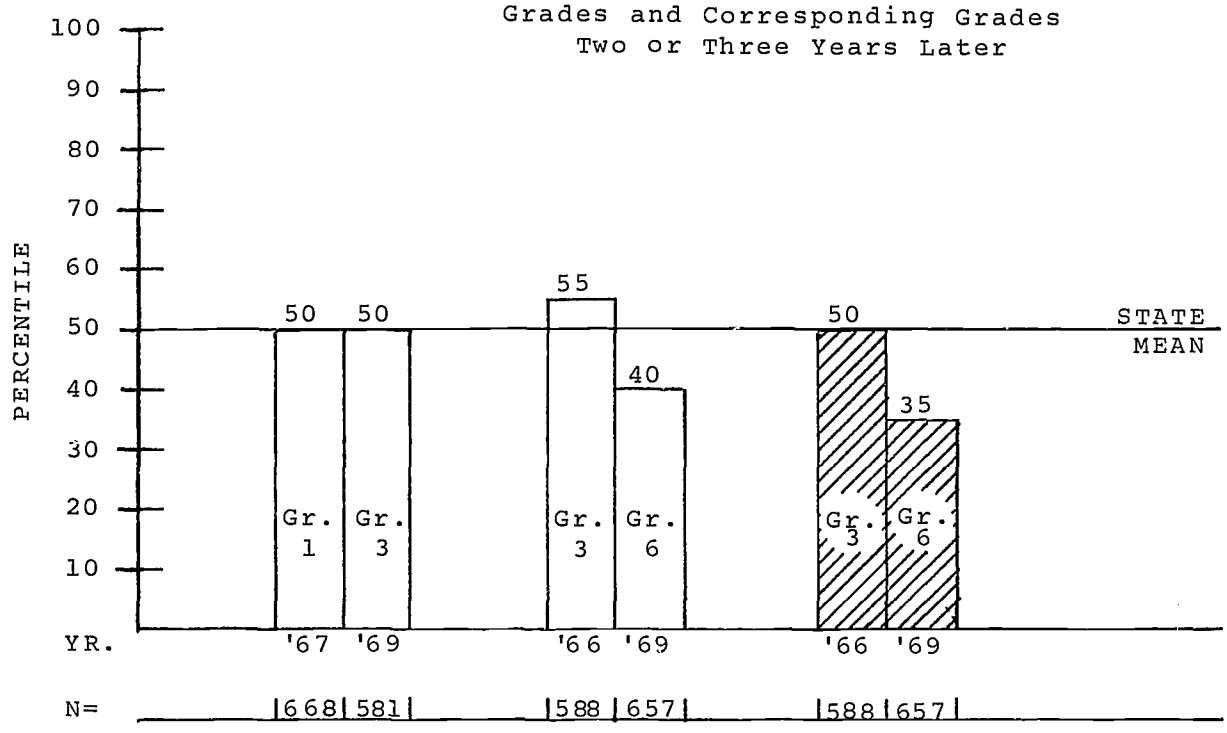
New York State Pupil Evaluation Program data were combined for those pupils attending the eight outer city schools that had large numbers involved in the Fifteen Point Program. As shown in Figure 2 (Page 46), the mean percentile is 50 (State norm) for those pupils from Grades 1-3 (readiness to reading), an expected occurrence, and for the Grade 3-6 level a decline from 55 to 40 in the reading mean and 50 to 35 in the arithmetic mean. On the same graph, the percentage of pupils scoring below minimum competency is less than 23 on three of the reading measures [Grade 1 (1967), Grade 3 (1969), and Grade 3 (1966)] and somewhat above 23 for the Grade 6 reading (69) and arithmetic (both 66 and 69).

When only those pupils who had complete pre and posttest data were separated from the gross outcomes as shown in Figure 2A (Page 47) and Table 3 in Appendix J, a somewhat different perspective is revealed. Mean percentile scores are at or above the statewide mean in six of the seven bar graphs shown. Moreover, the percentage scoring below minimum competency levels is below the State norm of 23 in all seven areas. Posttest outcomes, however, were significantly lower in three of the four analyses computed (Appendix J, Table 3: Readiness to Mathematics Grades 1-3; Reading to Reading Grades 3-6; and Arithmetic to Mathematics Grades 3-6). Only from Readiness results at Grade 1 to Reading Grade 3 was the mean difference for the same pupils within the expected range. Thus, the evidence indicates that some regression tendencies occurred beyond that which is desired or expected for those at the Grade 3-6 level in both reading and arithmetic outcomes as well as in math outcomes for the pupils from Grades 1-3.

CONTROL SCHOOL AND CHECK MEASURES (FIGURE 3, PAGE 48)

In evaluation studies of this type, controls are identified and used as a comparative base to determine, if possible, the extent to which treatment effects were responsible for changes revealed. For the final two years of the Fifteen Point Program, certain restraints were focused upon the primary Segregated Control School because of unusual pressures that surfaced during the 1968-69 school year. Until the New York State Pupil Evaluation Program data were analyzed, it was not possible to determine the possible extent to which pupils were affected by these pressures.

FIGURE 2 EIGHT OUTER CITY SCHOOLS (Combined)
School Mean Percentiles at Selected
Grades and Corresponding Grades
Two or Three Years Later



EIGHT OUTER CITY SCHOOLS (Combined)
Percentage Below Minimum Competency at
Selected Grades and Corresponding Grades
Two or Three Years Later

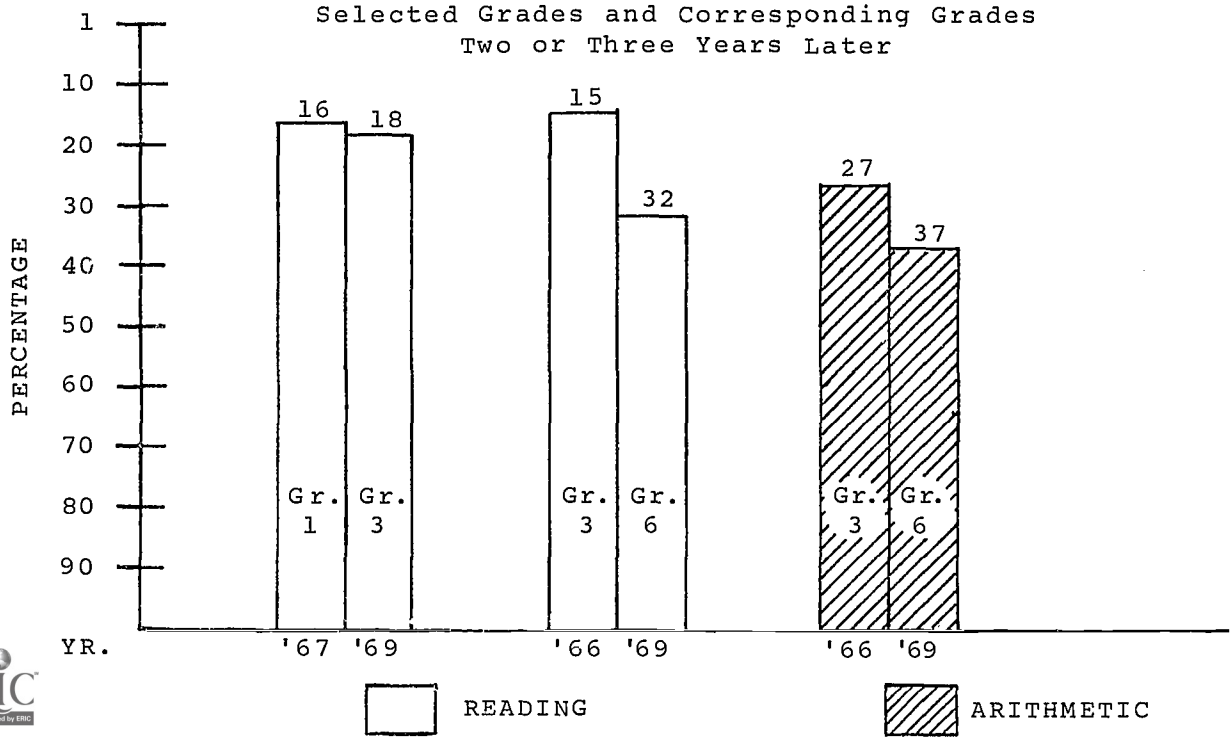
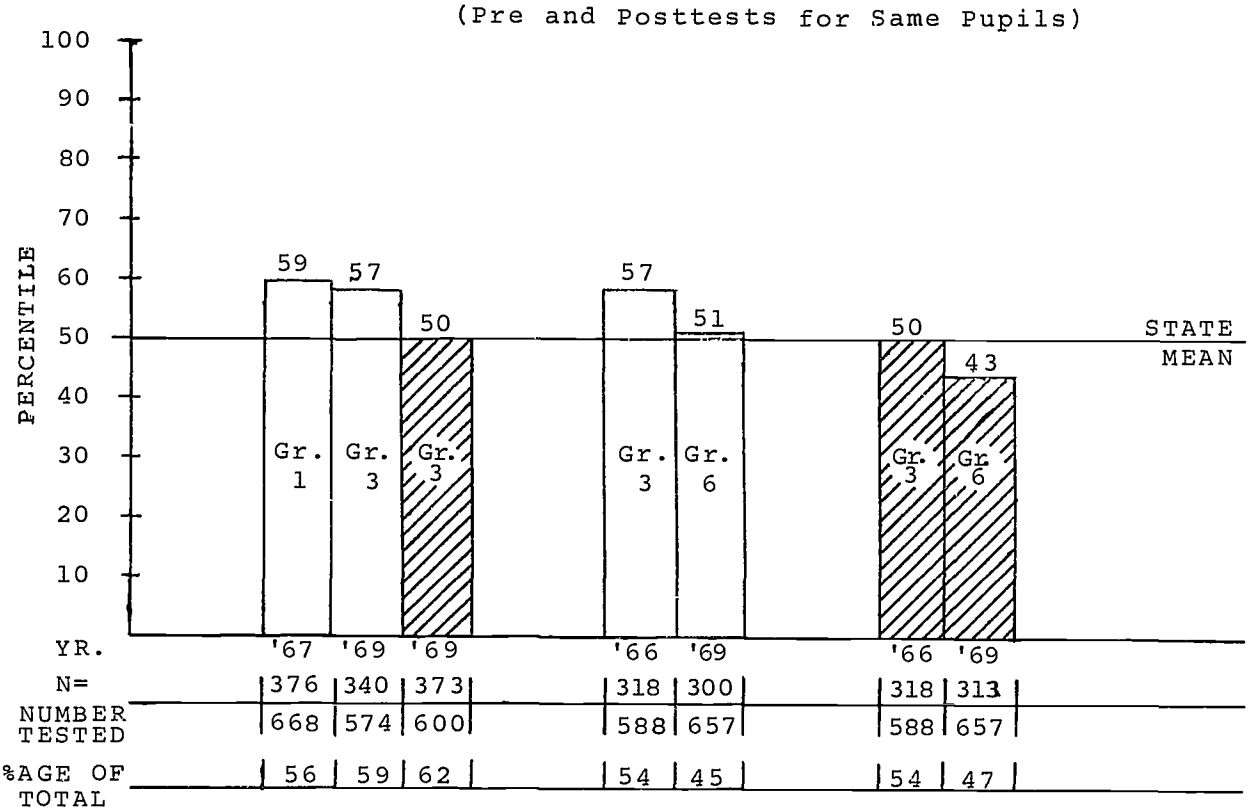


FIGURE 2A EIGHT OUTER CITY SCHOOLS (Combined)
School Mean Percentile
(Pre and Posttests for Same Pupils)



EIGHT OUTER CITY SCHOOLS (Combined)
Percentage Below Minimum Competency
(Pre and Posttests for Same Pupils)

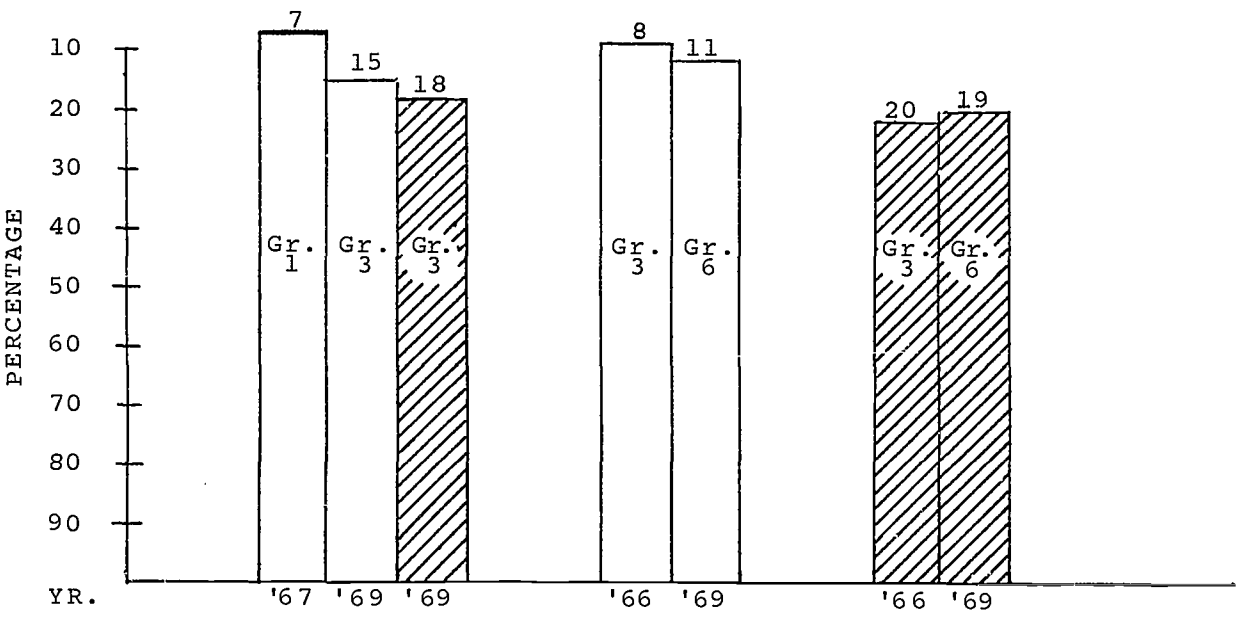
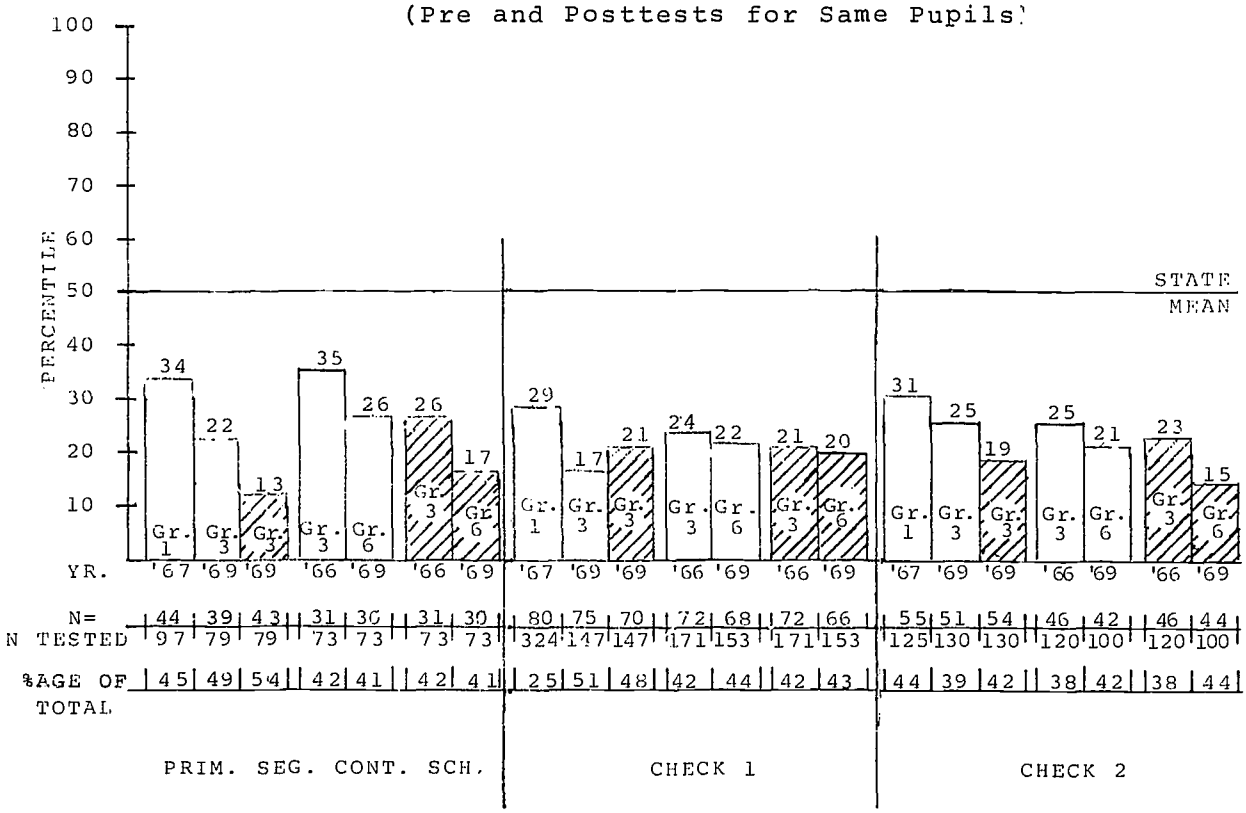
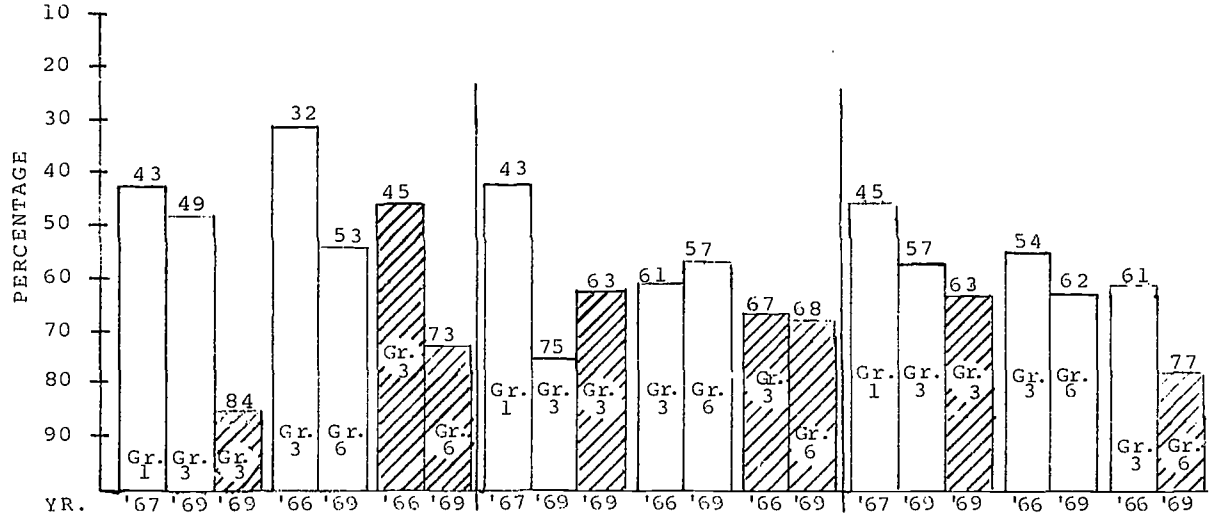


FIGURE 3 CHECK OF PRIMARY CONTROL SCHOOL
School Mean Percentile
(Pre and Posttests for Same Pupils)



CHECK OF PRIMARY CONTROL SCHOOL
Percentage Below Minimum Competency
(Pre and Posttests for Same Pupils)



To clarify this dilemma, two other largely segregated inner city school settings were identified and their New York State Pupil Evaluation Program results were analyzed. These Control School checks as they will be called, were not totally similar to the Control School highlighted in the study. There were slight variations in the ethnic makeup as well as the percentage scoring below minimum competency levels on the New York State Pupil Evaluation Program tests. In addition, the supplemental remedial services were somewhat greater at the check schools. Despite these differences, similarities were enough to warrant their usage as segregated control type measures. The detailed analyses of these control type schools are recorded in Appendix J, Table 4. From Table 4 of this chapter (Page 50) it is revealed that for Grade 1-3 participants (1967-69):

1. Pretest measures from these pupils who remained in the schools for two or three years were similar for the three segregated schools.

2. At posttest, both Control School checks were higher in arithmetic than the Control School.

3. The Control School did not differ from either check school in reading although the two check schools differed from each other.

For Grade 3-6 participants (1966-69):

1. On pretest measures, the Control School was higher than the two Control School checks.

2. On all posttest measures, the Control School was not significantly different from the Control School checks; however, Control School Check 1 was higher than Control School Check 2 in math.

Thus, some arresting of pupil scholastic achievement seems to have occurred at the Control School during the interval; part of it may have resulted from the pressures alluded to earlier.

An additional purpose rendered by the Control School checks permitted comparison with the two experimental procedures, i.e. the experimental and compensatory emphases. T-tests were computed for groups having participants at each of the respective grade levels for the three control type schools and the Experimental and Compensatory Schools. Table 4 presents the summary of analyses. Essentially, the implications are represented on Page 51.

TABLE 4

SUMMARY OF NYSPEP DATA ANALYSIS COMPARING TWO AND THREE YEAR PARTICIPANTS ENROLLED AT INNER CITY FIFTEEN POINT SCHOOLS WITH CONTROL SCHOOLS**

2-Year Participants ('67-'69 Data) Grades 1-3						3-Year Participants ('66-'69 Data Grades 3-6					
No. of Pupils		No. of Analyses*	No. & Dir. of Signif. Diff. Pre		No. & Dir. of Signif. Diff. Post			No. of Pupils		No. of Analyses*	No. & Dir. of Signif. Diff. Pre		No. & Dir. of Signif. Diff. Post	
			C O M P O N E N T											
A	B		A	B	A	B								
60	40	3	1	0	0	0				NO DATA APPLICABLE				
A	C		A	C	A	C		A	C					
60	44	3	1	0	2	0		43	31	4		A 1	C 0	A 2	C 0
B	C		B	C	B	C								
40	44	3	0	0	2	0				NO DATA APPLICABLE				
			C O M P O N E N T C H E C K											
C	C-1		C	C-1	C	C-1		C	C-1			C	C-1	C	C-1
44	80	3	0	0	0	1		31	72	4		1	0	0	0
C	C-2		C	C-2	C	C-2		C	C-2			C	C-2	C	C-2
44	55	3	0	0	0	1		31	46	4		1	0	0	0
C-2	C-1		C-2	C-1	C-2	C-1		C-2	C-1			C-2	C-1	C-2	C-1
55	80	3	0	0	1	0		46	72	4		0	0	0	1
			C O M P O N E N T V S. C H E C K											
A	C-2		A	C-2	A	C-2		A	C-2			A	C-2	A	C-2
60	55	3	1	0	2	0		43	46	4		2	0	2	0
A	C-1		A	C-1	A	C-1		A	C-1			A	C-1	A	C-1
60	80	3	1	0	2	0		60	72	4		2	0	2	0
B	C-2		B	C-2	B	C-2									
40	55	3	0	0	2	0				NO DATA APPLICABLE					
B	C-1		B	C-1	B	C-1									
40	80	3	0	0	2	0				NO DATA APPLICABLE					

* t-test for independent samples

** CODE: A - Experimental School
B - Compensatory School
C - Segregated Control School

Other Control Schools:
C-1 - Inner City Segregated School
C-2 - Inner City Segregated School

Grades 1-3		Grades 3-6	
Pretests	Posttests	Pretests	Posttests
A > B	A ~ B		
A > C	A > C	A > C	A > C
B ~ C	B > C		
A > C-1	A > C-1	A > C-1	A > C-1
A > C-2	A > C-2	A > C-2	A > C-2
B ~ C-1	B > C-1		
B ~ C-2	B > C-2		

NOTE: Where greater than (>) is compared with greater than, no differential growth is implied. Where similar (~) is compared to greater than, differential growth is implied.

Thus, the evidence shows that children attending the Experimental School reflected achievement results that were higher both on pre and posttest measures than their counterparts at the control type schools. Compensatory pupils were similar to control type school participants on pretests, but were significantly ahead of their comparees on posttest results.

The summary presented in Table 5 (Page 52) shows that the Compensatory School group was the only school among the five other types described in this report that did not regress, but increased their average percentile standing from pre to posttesting sessions. In addition, the Experimental School and the eight outer city schools tended to show pupils holding the same mean percentile standings from beginning of Grade 1 to the beginning of Grade 3, but declining from the beginning of Grade 3 to the beginning of Grade 6.

TABLE 5

SUMMARY OF NYSPEP DATA ANALYSIS COMPARING
PUPILS ENROLLED FOR TWO AND THREE YEARS AT THE SAME SCHOOL**

2-Year Participants ('67-'69 Data) Grades 1-3				3-Year Participants ('66-'69 Data Grades 3-6			
No. of Pupils	No. of Analyses*	No. & Dir. of Signif. Diff.		No. of Pupils	No. of Analyses*	No. & Dir. of Signif. Diff.	
		Pre	Post			Pre	Post
A 60	2	1	0	A 40	2	2	0
B 39	2	0	2	B	NO DATA APPLICABLE		
C 38	2	2	0	C 30	2	2	0
C-1 65	2	2	0	C-1 67	2	0	0
C-2 51	2	1	0	C-2 43	2	2	0
D 338	2	1	0	D 300	2	2	0

* Correlated t-test

** CODE: A - Experimental School
B - Compensatory School
C - Segregated Control School
C-1 - Segregated Control School (check 1)
C-2 - Segregated Control School (check 2)
D - Eight Outer City Schools (enrollees combined)

CHAPTER FIVE

THE FIFTEEN POINT PROGRAM IN PERSPECTIVE

STATUS OF THE FIFTEEN POINT PLAN

The plans that were presented to the Board of Education in February 1967 represented the administration's effort to provide a strategic solution to the problem of racial imbalance in the elementary schools of the City School District. As indicated earlier in this report, the Fifteen Point Plan was an outgrowth of selected features of the Combination Plan along with specific steps that could be implemented soon. This section summarizes or describes the present status of each part of the Fifteen Point Plan almost four years after its adoption in 1967 by the Rochester Board of Education.

1. USE SELECTED FEATURES OF THE COMBINATION PLAN BUT ADD ADDITIONAL STEPS WITHIN THE CITY TOGETHER WITH THOSE THAT MAY BE MADE POSSIBLE THROUGH THE COOPERATION OF THE LARGER COMMUNITY.

Under the Combination Plan, compensatory education for inner city children at the primary level was an integral option. It was implemented at School No. 3 (Component One of the Fifteen Point Program). However, the establishment of specific intermediate schools did not occur during the three year interval under surveillance. Under Zones A and C of the Reorganization Plan approved by the Board of Education in early 1970, the establishment of separate primary and intermediate schools became a reality.

2. REDUCE CLASS SIZE SHARPLY IN SEPTEMBER 1967 IN GRADES K-3 AT NATHANIEL ROCHESTER SCHOOL NO. 3 TO APPROXIMATELY FIFTEEN; IN ADDITION, A TEACHER AIDE, LIVING IN THE IMMEDIATE NEIGHBORHOOD, MAY BE EMPLOYED FOR EACH CLASSROOM; A FULLTIME SPECIALIST IN READING INSTRUCTION WILL BE ADDED TO THE STAFF OF SCHOOL NO. 3.

Table 2 on Page 11 of this report records the average class size for each of the major component schools described in this report. As shown for the three year interval, class size at School No. 3 averaged 18 pupils; however, during the first year it was 14.5 pupils and the second year 17.2 pupils. Thus, the class size average of fifteen was not maintained for the entire experimental period.

An aide was available for each of the classroom teachers at School No. 3 and the majority came from the immediate neighborhood. In addition, the services of a fulltime reading specialist was available throughout the time span. For the final two years of the program, classroom aides became available to School No. 14 teachers as well, but on a different ratio, i.e. one aide for two classroom teachers.

3. PROVIDE A READING SPECIALIST FOR EACH INNER CITY SCHOOL IN ADDITION TO THE PRESENT SUPERVISING AND HELPING TEACHER PROGRAMS.

At least one reading specialist was employed at each of the schools involved in the Fifteen Point Program. By utilizing funds made available through ESEA Title I, it became possible to expand the reading services to include two reading specialists, a community worker, and two aides for the reading teachers at each of the inner city elementary schools.

4. TRANSFER CHILDREN, WITH PARENTAL PERMISSION, IN GRADES 4-6 FROM SCHOOL NO. 3 TO SCHOOLS IN WHICH SPACE EXISTS OR CAN BE CREATED BY THE TRANSFER OF SOME SEVENTH GRADERS TO NEARBY HIGH SCHOOLS; THE RECEIVING SCHOOLS WILL INCLUDE SCHOOLS NO. 21, 30, 34, 38, 41, 42, 43, and 11.

In order to effect the plan, intermediate level children, i.e. Grades 4-6, in the School No. 3 District transferred to various outer city schools. For the 1970-71 school year, the Grade 4 pupils were retained at School No. 3. This altered the grade structure of the school and terminated the compensatory emphases that had endured for the three year experimental time period.

5. TRANSFER THREE M.A.P. CLASSES FOR THE GIFTED TO SCHOOL NO. 2 IN SEPTEMBER 1967 AND INVITE APPLICATIONS FROM SUBURBAN PARENTS FOR TRANSFER OF GIFTED CHILDREN TO THESE CLASSES ON A TUITION BASIS, AS SPACE PERMITS.

Two rather than three Major Achievement Program (MAP) classes were transferred to School No. 2 to instruct fifth and sixth grade pupils. This reduction occurred when Grade 7 pupils were transferred from the school in order to provide more space for the K-6 enrollment. For the three year period, the two M.A.P. classes functioned normally at School No. 2, but because of overcrowding were transferred to School No. 52 for the 1970-71 school year. Suburban pupil transfer was negligible.

6. IMPLEMENT IN SEPTEMBER 1967 A PROGRAM OF VOLUNTARY, REVERSE OPEN ENROLLMENT TO THE TWO NEW BEAUTIFUL SCHOOLS, CLARA BARTON SCHOOL NO. 2 AND DAG HAMMARSKJOLD SCHOOL NO. 6, AND PLAN FOR THE ESTABLISHMENT OF A SUMMER SCHOOL PROGRAM, OPEN TO STUDENTS IN THE CITY AT LARGE, AT THESE TWO SCHOOLS UNDER TITLE I OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965 FOR THE SUMMER OF 1967.

Two-way transfer, a preferred description of "reverse open enrollment," was effected at Schools No. 2 and 6, but on a limited basis at the latter school. Structured as a primary school, School No. 6 accepted the overflow of white children who would have transferred to School No. 2 if space had permitted. More than 200 white pupils were enrolled at School No. 2 while less than twenty-five were involved at School No. 6. However, two different Summer Programs were conducted and afforded interaction of pupils from the inner and outer city, as well as suburban districts.

7. THE ABOVE VOLUNTARY, REVERSE OPEN ENROLLMENT PROGRAM AND RELOCATION OF SOME CLASSES FOR THE GIFTED FOR THE PUBLIC SCHOOLS WILL BE ACCOMPANIED BY A SIMILAR PROGRAM IN THE CATHOLIC SCHOOLS AS ANNOUNCED BY THE RIGHT REVEREND MONSIGNOR ROCHE, SUPERINTENDENT OF DIOCESAN SCHOOLS.

Because of financial limitations, no formal efforts were taken by the Catholic Schools to provide classes for the gifted or to effect two-way transfer of inner and outer city parochial enrollees. However, as the result of summer school experiences, a number of inner city children transferred to parochial schools located in the suburbs as part of the Urban-Suburban Pupil Transfer Program.

8. IMPLEMENT THE INTERIM WORLD OF INQUIRY SCHOOL IN SEPTEMBER 1967 UNDER TITLE III OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965; THIS INTERIM SCHOOL, LOCATED IN THE INNER CITY, WOULD HOUSE 130 CHILDREN AND WOULD BE AN INTEGRATED SCHOOL WITH REGISTRATION FOR ATTENDANCE OPEN [TO PUPILS FROM BOTH THE CITY AND THE SUBURBS].

Following two years of extensive planning, the World of Inquiry School was established in the Fall of 1967 with an enrollment of 130 children, but increased in January 1968 to 150. Subsequent annual enrollments were 150 and 200. Now, in its fourth year of operation, the World of Inquiry School has maintained an ethnic balance that is believed to be representative of the city at large. Moreover, ESEA Title III funds financed the venture for the first three years, but with those funds expiring, a fund raising campaign was launched by a nonprofit educational corporation chartered by the New York State Board of Regents. For its fourth year of operation, the World of Inquiry School is relying upon financial support from industry, foundations, private groups and citizens, and local school district funds. With the changes in financial backing, there were concomitant effects upon structure, staffing, and transporting children. However, program objectives and operations have remained unchanged.

9. CONTINUE TO WORK FOR THE EXPANSION OF URBAN-SUBURBAN PUPIL TRANSFER PROGRAMS FOR BOTH THE SUMMER OF 1967 AND THE 1967-68 SCHOOL YEAR.

In 1967, Urban-Suburban Pupil Transfer involved 221 pupils who resided in the city but daily attended suburban district schools. Subsequent annual totals were 440 and 581. In the Fall of 1970 678 pupils were involved. Funded initially by ESEA Title III monies, the program now shares support from State Urban Education Aid, Racial Imbalance, and the City School District.

10. CONTINUE THE INTEGRATED PREKINDERGARTEN PROGRAM AT SYLVANUS A. ELLIS SCHOOL NO. 26.

In addition to the three years covered by this study, the integrated prekindergarten program at School No. 26 has been granted continuance for the 1970-71 school year as well.

11. ENCOURAGE THE DEVELOPMENT OF A VOLUNTARY COOPERATIVE FEDERATION OF SCHOOL DISTRICTS IN THE REGION TO DISCUSS AND PLAN WAYS OF REDUCING RACIAL ISOLATION IN MONROE COUNTY AS WELL AS OTHER MATTERS OF MUTUAL CONCERN.

What began as an informal voluntary interaction for Chief School Officers and Board Presidents of Monroe County in 1965, has now (September 1970) crystallized into a formal affiliation with the New York State School Boards Association for sixteen of eighteen districts. This significant action illustrates the intent of the Monroe County school districts to work together in resolving many mutual concerns and problems.

12. CONTINUE THE OPEN ENROLLMENT AND TRIAD PROGRAMS AND ENCOURAGE ADDITIONAL PARTICIPATION.

Initiated in February 1964, the Open Enrollment Plan has expanded from slightly under 500 pupils for each of its first two years to 1697, 1708, and 1798 pupils for the past three years (1967-68--1969-70) respectively. The Triad Program, however, has declined in recent years so that it no longer is a visible offering.

13. COOPERATE FULLY WITH ALL COMMUNITY AGENCIES WHOSE PROGRAMS SEEK TO REMOVE THE BASIC CAUSES OF RACIAL ISOLATION.

The Urban League, Action For a Better Community, establishment of Advisory Councils, Parents Advisory Committee for Title I, Ibero-American League, Rochester Neighborhood School Association Council, FIGHT, P.T.A., and Parochial and Private Schools, are among those community agencies sharing mutual interests with the City School District. Interaction varies in intensity, but is frequent.

14. WORK CLOSELY WITH THE OFFICE OF THE COORDINATOR OF THE DEMONSTRATION CITIES PROGRAM AND OTHER RELATED CITY DEPARTMENTS TO STRENGTHEN THE TOTAL EFFORT TO UPGRADE THE CITY THROUGH NEW EDUCATIONAL FACILITIES AND SERVICES; IN ADDITION, CONTINUE TO

STUDY THE REPLACEMENT OF SCHOOLS WITH A VIEW TOWARD SITE SELECTION THAT WILL IMPROVE OUR TOTAL EDUCATIONAL PROGRAM TO THE GREATEST EXTENT POSSIBLE AS WE ATTEMPT TO ACHIEVE QUALITY INTEGRATED EDUCATION.

School officials have worked with Model City, City Planning, and other officials in planning new schools modernization plans and their effects, and numerous other concerns. Since all housing projects involving family units affect the schools, selected officials serve as liaisons, thus keeping abreast of planned changes for the city.

15. REQUEST THE BOARD OF REGENTS AND THE COMMISSIONER OF EDUCATION OF NEW YORK STATE TO ASSIST THE BOARD OF EDUCATION IN ITS PLANNING BY SENDING A REPORT ON PROGRESS MADE TOWARD THE ELIMINATION OF LEGAL AND FINANCIAL BARRIERS TO REDUCING RACIAL ISOLATION IN THE SCHOOLS IN THE ROCHESTER AREA.

Discussions between Rochester and State Education officials have yielded no specific reports at this time. However, Regents policy statements repeatedly include the importance of interdistrict cooperation. In addition, State Education Department officials have offered assistance in determining how two districts may jointly sponsor the construction, staffing, and student staffing of one or more school buildings proposed for the periphery of the city. In effect, this would make urban-suburban access and cooperation a more probable reality. For the 1970-71 school year, an Urban Education Planning Office has been established in Rochester to activate interdistrict interests affecting the Rochester, Buffalo, and Syracuse metropolitan areas. As of this writing, time is needed to determine its impact.

SUMMARY AND IMPLICATIONS

This is the final report of a three year longitudinal effort to reduce racial isolation and to provide quality integrated education for elementary school pupils involved in the Rochester Fifteen Point Program. Pupil achievement, attendance, and perceived social growth and work habits were the measurements used to assess pupils enrolled in the various classroom settings. Specifically, the settings described in this report included segregated, compensatory, or integrated classrooms at eleven different City School District Elementary Schools during the three year period from September 1967 to June 1970. (For a description of each specific setting, the reader is referred to Page 14.)

For this final report, 556 comparisons were computed to answer the nine research questions raised earlier. Of that number, 283 involved pupil achievement, 91 pupil attendance, and 182 teacher perceptions of pupils' social growth and work habits. In addition, 76 comparisons were computed from the New York State Pupil Evaluation Program results.

The majority of comparisons revealed no significant differences. However, some outcomes have relevance for planning the future instructional program of the City School District. But caution must be preserved both in interpreting the outcomes and in applying them to planning activities.

As in many studies of this type, it is important to remember that conditions do not stand still for the researcher. Longitudinal studies in particular are often affected by uncontrollable program changes and design limitations. These changes and limitations must be kept in perspective as the reader reflects upon the findings. Among those factors affecting this study were pupil mobility, reduced sample size, teacher turnover, varying teacher emphases, community pressures, and instructional changes. Effort has been made to describe and account for most of them. Consequently, the outcomes are viewed as resulting from combined effects rather than singular ones. Moreover, the outcomes were relevant for a specific population sample, i.e. children enrolled at eleven elementary schools in Rochester, New York during the three year experimental time span. Thus, insightful caution must be exercised in viewing the following generalized outcomes.

1. THE ACHIEVEMENT OF BLACK PUPILS ENROLLED IN SEGREGATED CLASSES AT THE EXPERIMENTAL SCHOOL DURING THE THREE YEAR PERIOD WAS NOT APPRECIABLY DIFFERENT FROM SIMILAR PUPILS ENROLLED IN SEGREGATED CLASSES AT THE CONTROL SCHOOL. (THIS WAS EVIDENCED DESPITE PROGRAM ENRICHMENT ACTIVITIES THAT FAVORED PUPILS ATTENDING THE EXPERIMENTAL SCHOOL.)

2. BLACK PUPILS IN COMPENSATORY CLASSES ACHIEVED GREATER SCHOLASTIC GAINS THAN BLACK PUPILS IN SEGREGATED CLASSES; I.E. LOWER TEACHER-PUPIL RATIO (1-18 OR LESS) AND A TEACHER AIDE IN EACH CLASSROOM APPEAR TO HAVE HAD MEASURABLE EFFECT.

3. BLACK PUPILS IN INTEGRATED CLASSES TENDED TO SHOW GREATER ACHIEVEMENT GAINS THAN BLACK PUPILS IN SEGREGATED CLASSES. SINCE THIS WAS TRUE FOR BLACK PUPILS INTEGRATED BOTH AT THE INNER CITY EXPERIMENTAL SCHOOL AND OUTER CITY SCHOOLS, THERE IS INDICATION THAT INTEGRATION ITSELF MAY HAVE HAD SOME EFFECT. WHILE THE EXPERIMENTAL SCHOOL HAD SPECIAL ENRICHMENT EMPHASES, THE OUTER CITY SCHOOLS DID NOT, THUS CASTING DOUBT ON THE EFFECTIVENESS OF THE ENRICHMENT EMPHASES.

4. BLACK PUPILS IN COMPENSATORY CLASSES ACHIEVED AS WELL AS THE BLACK PUPILS ENROLLED IN INTEGRATED CLASSES AT THE EXPERIMENTAL SCHOOL, I.E. THE LOWER TEACHER-PUPIL RATIO AND CLASSROOM AIDE HAD AS MUCH IMPACT AS INTEGRATION AND ENRICHMENT EMPHASES.

5. PUPILS IN THE COMPENSATORY SCHOOL WERE THE ONLY STUDENTS AMONG THOSE ASSESSED IN THE FIFTEEN POINT PROGRAM WHO GAINED IN MEAN NEW YORK STATE PUPIL EVALUATION PROGRAM PERCENTILE STANDING DURING THE FIRST TWO GRADES.

6. IN THE AREAS MEASURED, THERE WERE NO APPRECIABLE DIFFERENCES BETWEEN BLACK PUPILS ENROLLED IN INTEGRATED CLASSES AT THE EXPERIMENTAL SCHOOL AND BLACK PUPILS ATTENDING CLASSES IN OUTER CITY SCHOOLS. (WHAT DIFFERENCES WERE EVIDENCED FAVORED THOSE PUPILS ENROLLED AT THE EXPERIMENTAL SCHOOL, IMPLYING THAT ENRICHMENT EMPHASES MAY HAVE HAD SOME EFFECT.)

7. THERE WERE NO APPRECIABLE DIFFERENCES IN OUTCOMES BETWEEN THE WHITE CHILDREN ENROLLED AT THE EXPERIMENTAL SCHOOL AND THE WHITE CHILDREN ATTENDING THEIR NEIGHBORHOOD SCHOOLS. (WHAT DIFFERENCES WERE EVIDENCED FAVORED THOSE PUPILS ENROLLED AT THE EXPERIMENTAL SCHOOL, IMPLYING THAT ENRICHMENT EMPHASES MAY HAVE HAD SOME EFFECT.)

8. BLACK PUPILS AND WHITE PUPILS WHO SCORED SIMILARLY ON PRETEST MEASURES AND WHO ATTENDED INTEGRATED CLASSES TENDED TO HAVE SIMILAR OUTCOMES THREE YEARS LATER.

9. BLACK PUPILS INTEGRATED AT THE PRIMARY LEVEL (GRADES K-3) TENDED TO SHOW RELATIVELY GREATER GAINS THAN THOSE BLACK PUPILS WHO BECAME INTEGRATED AT THE INTERMEDIATE LEVEL (GRADES 4-6).

10. PUPILS WHO REMAINED IN THE FIFTEEN POINT PROGRAM FOR THE ENTIRE THREE YEAR PERIOD TENDED TO HAVE HIGHER MEAN PRETEST ACHIEVEMENT SCORES THAN THOSE WHO TRANSFERRED OUT OF THEIR ORIGINAL SCHOOL. (THIS IMPLIES THAT THOSE PUPILS HAVING GREATER STABILITY IN RESIDENCY REFLECTED HIGHER ACHIEVEMENT OUTCOMES AS SHOWN IN THE ANALYSIS OF NEW YORK STATE PUPIL EVALUATION PROGRAM DATA.)

11. WHEN COMPARED TO BLACK PUPILS ENROLLED AT THE VARIOUS FIFTEEN POINT PARTICIPATING SCHOOLS, PUPILS ATTENDING THE CONTROL SCHOOL AND THE CONTROL SCHOOL CHECKS FARED LEAST WELL ON THE MEASURES ASSESSED, I.E. BLACK PUPILS IN SEGREGATED TYPE CLASSES WITH NEITHER REDUCED CLASS SIZE NOR EXTRA AIDES NOR ENRICHMENT EMPHASES SHOWED LEAST LEARNING PROGRESS AS DETERMINED BY VARIOUS ACHIEVEMENT MEASURES.

12. CHILDREN (BLACK PUPILS OR WHITE PUPILS) WHO ATTENDED SCHOOLS LOCATED IN THEIR NEIGHBORHOODS RECORDED FEWER DAYS OF ABSENTEEISM THAN THOSE ENROLLED IN SCHOOLS OUTSIDE OF THEIR RESIDENTIAL DISTRICT.

APPENDIX A

QUESTION ONE

HOW DOES THE ACHIEVEMENT OF BLACK PUPILS ATTENDING A SCHOOL WITH SMALL CLASS SIZE (AVERAGE K-3 = 15-18) COMPARE WITH THAT OF SIMILARLY SEGREGATED BLACK PUPILS IN SCHOOLS HAVING LARGER CLASS SIZES, i.e. EXPERIMENTAL SCHOOL AND CONTROL SCHOOL? (THE SPECIALLY FUNDED SUPPLEMENTS DIFFERED FOR EACH OF THE THREE SCHOOLS.)

COMPARISON OF
COMPENSATORY EDUCATION vs. SEGREGATION (EXPERIMENTAL SCHOOL)
(BLACK PUPILS)
TWO YEAR PARTICIPANTS - GRADE TWO

Test and Date	Compensatory Ed.			Segregation (Exp)			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1968							
N.Y.S. Readiness	44.92	13.97	25	33.67	14.43	12	
POSTTEST: May 1970 Adjusted*							
Met.Ach. Pr.II,Fm.C							
Word Knowledge	17.26	6.91	25	19.80	6.91	12	N S
Reading	25.04	9.76	25	24.91	9.76	12	N S
Problem Solving	24.18	6.71	25	28.32	6.71	11	N S
Computation	15.83	5.85	25	21.75	5.85	11	Sig
Year 1968-69							
Attendance	15.63	10.24	19	11.64	7.41	11	N S
Social Growth	2.58	.49	19	2.73	.62	11	N S
Work Habits	2.58	.59	19	2.91	.67	11	N S
Year 1969-70							
Attendance	14.18	8.66	22	9.83	7.79	12	N S
Social Growth	2.55	.66	22	3.17	.80	12	N S
Work Habits	2.64	.71	22	3.00	.82	12	N S

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
COMPENSATORY EDUCATION vs. SEGREGATION (EXPERIMENTAL SCHOOL)
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE THREE

Test and Date	Compensatory Ed.			Segregation (Exp)			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
N.Y.S. Readiness	46.24	13.38	38	53.93	11.09	15	
POSTTEST: May 1970 Adjusted*							
NYS El.Sch,Gr.3,Fm.B							
Word Recognition	19.16	4.62	38	15.99	4.62	14	Sig
Reading	17.53	4.86	38	15.41	4.86	14	N S
Computation	12.91	2.72	38	11.16	2.72	15	Sig
Problem Solving	12.27	3.87	38	9.85	3.87	15	N S
Concepts	12.77	4.93	38	9.71	4.93	14	N S
Year 1968-69							
Attendance	6.17	4.91	24	5.00	2.33	7	N S
Social Growth	2.10	.81	21	3.00	.89	10	Sig
Work Habits	2.10	.81	21	2.70	.90	10	N S
Year 1969-70							
Attendance	9.63	10.01	38	11.47	9.57	15	N S
Social Growth	2.65	.78	37	2.53	.72	15	N S
Work Habits	2.68	.84	37	2.87	1.15	15	N S

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
COMPENSATORY EDUCATION vs. SEGREGATION (CONTROL SCHOOL)
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE THREE

Test and Date	Compensatory Ed.			Segregation (Con)			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
N.Y.S. Readiness	46.24	13.38	38	50.24	16.04	42	N S
POSTTEST: May 1970							
NYS El.Sch,Gr.3,Fm.B							
Word Recognition	19.13	3.90	38	16.10	5.65	41	Sig
Reading	17.47	4.79	38	13.68	4.22	41	Sig
Computation	12.76	2.59	38	10.42	3.84	38	Sig
Problem Solving	12.03	3.99	38	8.73	3.54	37	Sig
Concepts	12.71	4.82	38	7.38	3.86	37	Sig
Year 1968-69							
Attendance	6.17	4.91	24	12.00	5.35	3	N S
Social Growth	2.10	.81	21	2.33	.94	3	N S
Work Habits	2.10	.81	21	2.67	.94	3	N S
Year 1969-70							
Attendance	9.63	10.01	38	11.27	12.67	41	N S
Social Growth	2.65	.78	37	2.65	.82	40	N S
Work Habits	2.68	.84	37	2.63	.83	40	N S

APPENDIX B

QUESTION TWO

HOW DOES THE ACHIEVEMENT OF BLACK PUPILS ATTENDING A SCHOOL WITH SMALL CLASS SIZE (AVERAGE K-3 = 15-18) COMPARE WITH

THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL AND

THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS?

COMPARISON OF
COMPENSATORY EDUCATION vs. INTEGRATION-IN
(BLACK PUPILS)
TWO YEAR PARTICIPANTS - GRADE TWO

Test and Date	Compensatory Ed.			Integration-In			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1968							
N.Y.S. Readiness	44.92	13.97	25	60.00	12.21	9	
POSTTEST: May 1970 Adjusted*							
Met.Ach. Pr.II,Fm.C							
Word Knowledge	18.93	6.64	25	18.86	6.64	9	N S
Reading	27.22	9.66	25	29.28	9.66	9	N S
Problem Solving	24.86	7.27	25	28.82	7.27	9	N S
Computation	16.52	4.70	25	21.33	4.70	9	Sig
Year 1968-69							
Attendance	15.63	10.24	19	11.67	5.56	9	N S
Social Growth	2.58	.49	19	2.78	.42	9	N S
Work Habits	2.58	.59	19	2.67	.82	9	N S
Year 1969-70							
Attendance	14.18	8.66	22	10.11	3.70	9	N S
Social Growth	2.55	.66	22	2.22	.42	9	N S
Work Habits	2.64	.71	22	2.33	.94	9	N S

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
COMPENSATORY EDUCATION vs. INTEGRATION-IN
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE THREE

Test and Date	Compensatory Ed.			Integration-In			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
N.Y.S. Readiness	46.24	13.38	38	57.35	13.91	17	
POSTTEST: May 1970 Adjusted*							
NYS El.Sch,Gr.3,Fm.B							
Word Recognition	19.29	3.80	38	20.99	3.80	17	N S
Reading	17.78	4.58	38	18.67	4.58	17	N S
Computation	12.91	2.35	38	12.91	2.35	16	N S
Problem Solving	12.30	3.33	38	12.55	3.33	16	N S
Concepts	12.80	4.31	38	13.16	4.31	16	N S
Year 1968-69							
Attendance	6.17	4.91	24	9.57	6.00	14	N S
Social Growth	2.10	.81	21	2.29	1.03	14	N S
Work Habits	2.10	.81	21	1.93	1.16	14	N S
Year 1969-70							
Attendance	9.63	10.01	38	14.88	14.85	17	N S
Social Growth	2.65	.78	37	2.71	1.02	17	N S
Work Habits	2.68	.84	37	2.82	1.10	17	N S

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
COMPENSATORY EDUCATION vs. INTEGRATION-OUT
(BLACK PUPILS)
TWO YEAR PARTICIPANTS - GRADE TWO

Test and Date	Compensatory Ed.			Integration-Out			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1968							
N.Y.S. Readiness	44.92	13.97	25	56.16	11.01	19	
POSTTEST: May 1970 Adjusted*							
Met.Ach. Pr.II,Fm.C							
Word Knowledge	19.14	6.72	25	18.97	6.72	18	N S
Reading	27.89	9.89	25	22.19	9.89	19	N S
Problem Solving	25.34	6.89	25	26.81	6.89	19	N S
Computation	16.48	6.00	25	18.11	6.00	19	N S
Year 1968-69							
Attendance	15.63	10.24	19	17.05	12.05	19	N S
Social Growth	2.58	.49	19	2.89	.74	18	N S
Work Habits	2.58	.59	19	2.89	.74	18	N S
Year 1969-70							
Attendance	14.18	8.66	22	14.44	8.88	18	N S
Social Growth	2.55	.66	22	2.83	.90	18	N S
Work Habits	2.64	.71	22	2.94	.91	18	N S

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
COMPENSATORY EDUCATION vs. INTEGRATION-OUT
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE THREE

Test and Date	Compensatory Ed.			Integration-Out			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
N.Y.S. Readiness	46.24	13.38	38	55.67	12.87	18	
POSTTEST: May 1970 Adjusted*							
NYS El.Sch,Gr.3,Fm.B							
Word Recognition	19.39	3.98	38	20.73	3.98	18	N S
Reading	17.88	4.75	38	18.71	4.75	18	N S
Computation	12.96	2.61	38	12.44	2.61	17	N S
Problem Solving	12.44	3.48	38	12.55	3.48	17	N S
Concepts	12.92	4.33	38	12.30	4.33	17	N S
Year 1968-69							
Attendance	6.17	4.91	24	8.75	1.30	14	N S
Social Growth	2.10	.81	21	2.75	.83	14	N S
Work Habits	2.10	.81	21	2.50	.50	14	N S
Year 1969-70							
Attendance	9.63	10.01	38	10.61	5.74	18	N S
Social Growth	2.65	.78	[illegible]	3.06	.85	18	N S
Work Habits	2.68	.84	37	2.89	1.15	18	N S

* Covariance adjusted posttest means for each corresponding pretest variable

APPENDIX C

QUESTION THREE

HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL COMPARE WITH THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS?

COMPARISON OF
INTEGRATION-IN vs. INTEGRATION-OUT
(BLACK PUPILS)
TWO YEAR PARTICIPANTS - GRADE TWO

Test and Date	Integration-In			Integration-Out			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1968							
N.Y.S. Readiness	60.00	12.21	9	56.16	11.01	19	N S
POSTTEST: May 1970							
Met. Ach. Pr.II,Fm.C							
Word Knowledge	21.78	5.81	9	20.72	6.63	18	N S
Reading	32.33	8.64	9	24.53	10.31	19	N S
Problem Solving	29.78	5.98	9	27.89	6.63	19	N S
Computation	22.44	2.59	9	18.58	7.13	19	N S
Year 1968-69							
Attendance	11.67	5.56	9	17.05	12.05	19	N S
Social Growth	2.78	.42	9	2.89	.74	18	N S
Work Habits	2.67	.82	9	2.89	.74	18	N S
Year 1969-70							
Attendance	10.11	3.70	9	14.44	8.88	18	N S
Social Growth	2.22	.42	9	2.83	.90	18	N S
Work Habits	2.33	.94	9	2.94	.91	18	N S

COMPARISON OF
INTEGRATION-IN vs. INTEGRATION-OUT
(BLACK PUPILS)
THREE YEAR PARTICIPANTS-GRADE THREE

Test and Date	Integration-In			Integration-Out			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
N.Y.S. Readiness	56.81	14.16	16	55.67	12.87	18	N S
POSTTEST: May 1970							
NYS El.Sch, Gr.3,Fm.B							
Word Recognition	21.69	3.35	16	21.28	4.48	18	N S
Reading	19.50	4.66	16	19.56	5.56	18	N S
Computation	13.20	2.10	15	12.88	3.08	17	N S
Problem Solving	13.33	2.24	15	13.47	3.94	17	N S
Concepts	13.53	2.85	15	12.76	3.39	17	N S
Year 1968-69							
Attendance	10.15	5.83	13	8.75	1.30	4	N S
Social Growth	2.15	.95	13	2.75	.83	4	N S
Work Habits	1.77	1.05	13	2.50	.50	4	N S
Year 1969-70							
Attendance	15.81	14.82	16	10.61	5.74	18	N S
Social Growth	2.63	.99	16	3.06	.85	18	N S
Work Habits	2.69	.98	16	2.89	1.15	18	N S

COMPARISON OF
INTEGRATION-IN vs. INTEGRATION-OUT
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE FIVE

Test and Date	Integration-In			Integration-Out			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
NYS El.Sch, Gr.3,Fm.A							
Word Recognition	14.00	4.56	15	15.83	5.40	12	N S
Reading	11.60	4.50	15	13.08	6.38	12	N S
Computation	8.47	2.19	15	6.67	3.06	12	N S
Problem Solving	7.93	2.62	15	8.42	2.78	12	N S
Concepts	5.47	2.83	15	6.25	2.52	12	N S
POSTTEST: May 1970							
Iowa Test Bas. Skills							
Vocabulary	19.07	8.94	15	22.50	10.71	12	N S
Reading	35.60	13.27	15	32.67	13.36	12	N S
Concepts	17.86	7.24	14	16.00	6.79	12	N S
Problem Solving	11.00	4.94	14	8.33	3.25	12	N S
Year 1968-69							
Attendance	2.60	2.62	10	7.75	5.97	4	Sig
Social Growth	2.90	1.04	10	3.00	1.22	4	N S
Work Habits	3.00	.45	10	3.00	1.22	4	N S
Year 1969-70							
Attendance	7.07	7.91	15	13.92	10.54	12	N S
Social Growth	2.33	.79	15	3.33	.94	12	Sig
Work Habits	2.13	.81	15	3.33	1.03	12	Sig

COMPARISON OF
INTEGRATION-IN vs. INTEGRATION-OUT
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE SIX

Test and Date	Integration-In			Integration-Out			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
Iowa Test Bas.Skills							
Vocabulary	17.33	6.94	24	10.92	4.18	13	
Reading	30.58	9.83	24	19.15	6.00	13	
Concepts	14.42	6.33	24	9.69	2.55	13	
Problem Solving	10.29	4.31	24	6.31	1.64	13	
POSTTEST: May 1970 Adjusted*							
NYS El.Sch,Gr.6,Fm.B							
Word Recognition	20.37	4.94	24	16.08	4.94	13	Sig
Reading	23.64	5.77	24	23.75	5.77	13	N S
Concepts	10.17	3.48	24	6.99	3.48	13	Sig
Problem Solving	11.75	4.24	24	8.54	4.24	13	N S
Year 1968-69							
Attendance	4.00	3.28	16	6.33	4.06	9	N S
Social Growth	2.06	1.03	16	2.89	.31	9	Sig
Work Habits	1.69	.92	16	2.89	.57	9	Sig
Year 1969-70							
Attendance	6.79	6.13	24	13.13	12.74	8	N S
Social Growth	2.96	.93	24	2.88	.93	8	N S
Work Habits	2.75	1.13	24	3.50	1.22	8	N S

* Covariance adjusted posttest means for each corresponding pretest variable

APPENDIX D

QUESTION FOUR

HOW DOES THE ACHIEVEMENT OF WHITE PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL COMPARE WITH THE ACHIEVEMENT OF A SIMILAR GROUP OF WHITE PUPILS IN OUTER CITY SCHOOLS?

COMPARISON OF
INTEGRATION-IN vs. INTEGRATION-OUT
(WHITE PUPILS)
TWO YEAR PARTICIPANTS - GRADE TWO

Test and Date	Integration-In			Integration-Out			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1968							
N.Y.S. Readiness	75.32	18.65	22	72.78	16.75	18	N S
POSTTEST: May 1970							
Met. Ach. Pr.II, Fm.C							
Word Knowledge	31.82	4.61	22	26.83	8.40	18	Sig
Reading	42.76	5.82	21	33.88	13.08	17	Sig
Problem Solving	35.85	5.16	20	34.39	6.33	18	N S
Computation	24.90	4.94	20	22.00	5.25	18	N S
Year 1968-69							
Attendance	15.05	15.71	22	11.06	8.95	18	N S
Social Growth	2.14	.69	22	1.83	.69	18	N S
Work Habits	2.18	.94	22	1.56	.76	18	Sig
Year 1969-70							
Attendance	12.36	6.71	22	11.72	8.72	18	N S
Social Growth	1.73	.75	22	2.06	1.03	18	N S
Work Habits	1.91	.85	22	2.33	1.41	18	N S

COMPARISON OF
INTEGRATION-IN vs. INTEGRATION-OUT
(WHITE PUPILS)
TWO YEAR PARTICIPANTS - GRADE FOUR

Test and Date	Integration-In			Integration-Out			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1968							
NYS El.Sch, Gr.3,Fm.A							
Word Recognition	20.13	4.28	8	18.89	4.77	9	
Reading	18.43	5.73	7	17.11	6.47	9	
Problem Solving	13.71	4.83	7	12.67	4.50	9	
Concepts	13.71	4.83	7	12.67	4.50	9	
POSTTEST: May 1970 Adjusted*							
Iowa Test Bas. Skills							
Vocabulary	27.51	4.97	8	23.77	4.97	9	N S
Reading	42.87	7.76	7	36.77	7.76	9	N S
Problem Solving	23.47	5.35	7	22.74	5.35	9	N S
Concepts	19.20	4.84	7	16.51	4.84	9	N S
Year 1968-69							
Attendance	12.33	9.86	6	13.00	7.13	5	N S
Social Growth	1.83	.69	6	2.00	.63	5	N S
Work Habits	2.67	.75	6	2.20	1.17	5	N S
Year 1969-70							
Attendance	11.17	6.64	6	14.22	9.72	9	N S
Social Growth	2.17	.69	6	2.22	1.03	9	N S
Work Habits	1.83	.69	6	2.44	1.26	9	N S

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
INTEGRATION-IN vs. INTEGRATION-OUT
(WHITE PUPILS)
TWO YEAR PARTICIPANTS - GRADE FIVE

Test and Date	Integration-In			Integration-Out			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1968							
Iowa Test Bas. Skills							
Vocabulary	27.50	8.04	10	25.43	7.05	14	N S
Reading	46.00	10.06	10	42.07	10.28	14	N S
Concepts	20.00	5.37	9	21.07	3.39	14	N S
Problem Solving	13.44	3.56	9	13.93	4.61	14	N S
POSTTEST: May 1970							
Iowa Test Bas. Skills							
Vocabulary	36.40	5.39	10	33.21	6.48	14	N S
Reading	59.20	9.55	10	53.57	10.40	14	N S
Concepts	32.78	5.55	9	30.21	6.10	14	N S
Problem Solving	20.00	6.20	9	17.86	4.91	14	N S
Year 1968-69							
Attendance	15.70	9.06	10	4.86	4.32	14	Sig
Social Growth	1.20	.40	10	1.93	.70	14	Sig
Work Habits	1.60	.80	10	2.07	.88	14	N S
Year 1969-70							
Attendance	13.40	11.05	10	9.64	5.11	14	N S
Social Growth	1.20	.40	10	1.50	.50	14	N S
Work Habits	1.30	.64	10	1.71	.88	14	N S

COMPARISON OF
INTEGRATION-IN vs. INTEGRATION-OUT
(WHITE PUPILS)
TWO YEAR PARTICIPANTS - GRADE SIX

Test and Date	Integration-In			Integration-Out			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1968							
Iowa Test Bas. Skills							
Vocabulary	25.56	8.93	9	20.00	6.95	8	
Reading	47.50	10.05	10	33.13	10.91	8	
Concepts	20.70	6.08	10	22.63	6.50	8	
Problem Solving	12.00	3.26	10	11.13	5.21	8	
POSTTEST: May 1970 Adjusted*							
NYS El.Sch, Gr.6,Fm.B							
Word Recognition	19.31	3.62	9	21.77	3.62	8	N S
Reading	29.34	3.43	10	28.83	3.43	8	N S
Concepts	11.03	3.11	10	11.59	3.11	8	N S
Problem Solving	12.18	3.05	10	13.77	3.05	8	N S
Year 1968-69							
Attendance	13.64	7.70	11	4.25	2.90	8	Sig
Social Growth	2.27	.96	11	2.75	.66	8	N S
Work Habits	2.36	1.23	11	2.50	.71	8	N S
Year 1969-70							
Attendance	17.73	10.94	11	6.75	6.18	8	Sig
Social Growth	2.18	.72	11	2.38	.70	8	N S
Work Habits	2.82	1.27	11	2.50	.87	8	N S

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
INTEGRATION-IN vs. INTEGRATION-OUT
(WHITE PUPILS)
THREE YEAR PARTICIPANTS - GRADE THREE

Test and Date	Integration-In			Integration-Out			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
N.Y.S. Readiness	73.52	15.81	21	71.12	12.22	25	N S
POSTTEST: May 1970							
NYS El.Sch, Gr.3,Fm.B							
Word Recognition	22.10	3.85	21	22.28	3.98	25	N S
Reading	22.67	5.44	21	22.52	5.25	25	N S
Computation	14.14	1.36	21	13.60	2.37	25	N S
Problem Solving	16.86	3.23	21	15.76	4.56	25	N S
Concepts	15.43	4.96	21	16.04	4.24	25	N S
Year 1968-69							
Attendance	3.00	1.73	8	3.20	2.09	10	N S
Social Growth	2.13	.93	8	2.40	.66	10	N S
Work Habits	1.63	.70	8	2.60	.92	10	Sig
Year 1969-70							
Attendance	8.05	3.91	21	8.46	6.18	24	N S
Social Growth	2.33	1.08	21	2.04	.93	24	N S
Work Habits	2.62	1.21	21	2.21	1.04	24	N S

COMPARISON OF
INTEGRATION-IN vs. INTEGRATION-OUT
(WHITE PUPILS)
THREE YEAR PARTICIPANTS - GRADE FIVE

Test and Date	Integration-In			Integration-Out			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
NYS El.Sch, Gr.3,Fm.A							
Word Recognition	20.25	3.96	8	19.56	3.06	9	N S
Reading	18.88	5.25	8	20.11	4.95	9	N S
Computation	9.56	4.52	9	9.67	2.31	9	N S
Problem Solving	12.56	4.57	9	13.56	3.34	9	N S
Concepts	9.67	3.27	9	10.22	2.74	9	N S
POSTTEST: May 1970							
Iowa Test Bas. Skills							
Vocabulary	31.22	7.18	9	30.33	5.25	9	N S
Reading	51.56	11.17	9	46.33	11.13	9	N S
Concepts	28.44	6.45	9	25.56	3.24	9	N S
Problem Solving	18.33	5.64	9	14.67	4.32	9	N S
Year 1968-69							
Attendance	5.13	4.01	8	3.50	2.12	8	N S
Social Growth	2.00	1.00	8	1.75	.66	8	N S
Work Habits	2.00	.71	8	1.88	.93	8	N S
Year 1969-70							
Attendance	9.78	5.49	9	7.00	4.57	9	N S
Social Growth	1.67	.67	9	2.00	.67	9	N S
Work Habits	1.33	.47	9	1.78	.79	9	N S

COMPARISON OF
INTEGRATION-IN vs. INTEGRATION-OUT
(WHITE PUPILS)
THREE YEAR PARTICIPANTS - GRADE SIX

Test and Date	Integration-In			Integration-Out			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
Iowa Test Bas. Skills							
Vocabulary	21.00	9.75	14	23.14	8.79	14	N S
Reading	38.71	12.34	14	39.29	10.36	14	N S
Concepts	17.43	6.55	14	19.43	4.45	14	N S
Problem Solving	12.93	4.51	14	14.00	4.94	14	N S
POSTTEST: May 1970							
NYS El.Sch, Gr.6,Fm.B							
Word Recognition	23.64	5.74	14	25.31	4.29	13	N S
Reading	29.29	5.81	14	28.00	6.49	13	N S
Computation	14.50	3.48	14	16.57	2.80	14	N S
Problem Solving	14.36	4.17	14	15.00	3.14	14	N S
Concepts	12.71	3.95	14	12.86	4.29	14	N S
Year 1968-69							
Attendance	3.89	3.07	9	3.70	3.77	10	N S
Social Growth	2.11	.74	9	1.45	.66	11	Sig
Work Habits	2.00	.82	9	1.82	.83	11	N S
Year 1969-70							
Attendance	12.00	7.46	14	8.79	5.47	14	N S
Social Growth	2.21	1.08	14	1.93	1.10	14	N S
Work Habits	2.36	1.29	14	2.14	1.19	14	N S

APPENDIX E

QUESTION FIVE

HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES COMPARE WITH

THE ACHIEVEMENT OF PUPILS IN CLASSES ALMOST COMPLETELY BLACK IN ENROLLMENT WITHIN THE SAME SCHOOL AND

THAT OF SEGREGATED PUPILS IN A NEIGHBORING SCHOOL?

COMPARISON OF
SEGREGATION (EXPERIMENTAL SCHOOL) vs. INTEGRATION-IN
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE THREE

Test and Date	Segregation (Exp)			Integration-In			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
N.Y.S. Readiness	53.93	11.09	15	56.81	14.16	16	N S
POSTTEST: May 1970							
NYS El.Sch, Gr.3,Fm.B							
Word Recognition	16.07	5.57	14	21.69	3.35	16	Sig
Reading	15.57	4.78	14	19.50	4.66	16	N S
Computation	11.53	3.12	15	13.20	2.10	15	N S
Problem Solving	10.47	3.98	15	13.33	2.24	15	N S
Concepts	9.86	4.61	14	13.53	2.85	15	Sig
Year 1968-69							
Attendance	5.00	2.33	7	10.15	5.83	13	N S
Social Growth	3.00	.89	10	2.15	.95	13	Sig
Work Habits	2.70	.90	10	1.77	1.05	13	Sig
Year 1969-70							
Attendance	11.47	9.57	15	15.81	14.82	16	N S
Social Growth	2.53	.72	15	2.63	.99	16	N S
Work Habits	2.87	1.15	15	2.69	.98	16	N S

COMPARISON OF
INTEGRATION-IN vs. SEGREGATION (EXPERIMENTAL SCHOOL)
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE FOUR

Test and Date	Integration-In			Segregation (Exp)			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
Met.Ach. Pr.II, Fm.A							
Word Knowledge	16.36	7.85	14	11.81	4.86	16	
Reading	17.13	12.24	15	13.38	6.07	16	
Problem Solving	17.93	5.26	15	17.31	4.44	16	
POSTTEST: May 1970 Adjusted*							
Iowa Test Bas.Skills							
Vocabulary	18.95	7.59	14	18.10	7.59	16	N S
Reading	27.86	8.08	15	25.94	8.08	16	N S
Problem Solving	10.59	3.93	15	11.19	3.93	15	N S
Year 1968-69							
Attendance	3.75	2.05	8	5.82	5.51	11	N S
Social Growth	2.75	1.09	8	2.00	.77	10	N S
Work Habits	2.63	.86	8	2.00	.45	10	N S
Year 1969-70							
Attendance	6.50	5.15	14	13.06	10.19	16	Sig
Social Growth	2.43	.90	14	2.31	.85	16	N S
Work Habits	2.93	1.10	14	2.13	.86	16	Sig

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
INTEGRATION-IN vs. SEGREGATION (EXPERIMENTAL SCHOOL)
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE FIVE

Test and Date	Integration-In			Segregation (Exp)			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
NYS El.Sch, Gr.3,Fm.A							
Word Recognition	14.00	4.56	15	14.45	5.43	11	N S
Reading	11.60	4.50	15	9.82	5.17	11	N S
Computation	8.47	2.19	15	5.55	3.39	11	Sig
Problem Solving	7.93	2.62	15	6.91	2.87	11	N S
Concepts	5.47	2.83	15	5.82	3.04	11	N S
POSTTEST: May 1970							
Iowa Test Bas. Skills							
Vocabulary	19.07	8.94	15	18.40	4.67	10	N S
Reading	35.60	13.27	15	29.90	13.39	10	N S
Concepts	17.86	7.24	14	15.36	7.93	11	N S
Problem Solving	11.00	4.94	14	7.36	4.35	11	N S
Year 1968-69							
Attendance	2.60	2.62	10	2.50	1.96	10	N S
Social Growth	2.90	1.04	10	2.00	1.18	10	N S
Work Habits	3.00	.45	10	2.30	1.10	10	N S
Year 1969-70							
Attendance	7.07	7.91	15	9.55	7.00	11	N S
Social Growth	2.33	.79	15	3.55	.78	11	Sig
Work Habits	2.13	.81	15	3.00	1.13	11	Sig

COMPARISON OF
INTEGRATION-IN vs. SEGREGATION (EXPERIMENTAL SCHOOL)
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE SIX

Test and Date	Integration-In			Segregation (Exp)			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
Iowa Test Bas.Skills							
Vocabulary	17.33	6.94	24	9.38	4.05	26	
Reading	30.58	9.83	24	21.62	8.09	26	
Concepts	14.42	6.33	24	11.80	4.75	25	
Problem Solving	10.29	4.31	24	7.24	3.98	25	
POSTTEST: May 1970 Adjusted*							
NYS El.Sch,Gr.6,Fm.B							
Word Recognition	19.72	5.23	24	17.99	5.23	26	N S
Reading	24.02	5.26	24	21.60	5.26	26	N S
Concepts	10.10	3.43	24	7.86	3.43	25	Sig
Problem Solving	11.54	3.95	24	10.88	3.95	25	N S
Year 1968-69							
Attendance	4.00	3.28	16	4.33	5.54	9	N S
Social Growth	2.06	1.03	16	2.44	.83	9	N S
Work Habits	1.69	.92	16	2.44	1.07	9	N S
Year 1969-70							
Attendance	6.79	6.13	24	10.46	10.92	26	N S
Social Growth	2.96	.93	24	3.00	.78	26	N S
Work Habits	2.75	1.13	24	3.19	.92	26	N S

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
SEGREGATION (CONTROL SCHOOL) vs. INTEGRATION-IN
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE THREE

Test and Date	Segregation (Con)			Integration-In			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
N.Y.S. Readiness	49.59	15.67	41	57.35	13.91	17	
POSTTEST: May 1970 Adjusted*							
NYS El.Sch,Gr.3,Fm.B							
Word Recognition	16.28	5.38	41	20.91	5.38	17	Sig
Reading	13.97	4.39	41	18.66	4.39	17	Sig
Computation	10.55	3.27	38	12.93	3.27	16	Sig
Problem Solving	8.80	3.65	37	13.03	3.65	16	Sig
Concepts	7.52	4.10	37	13.06	4.10	16	Sig
Year 1968-69							
Attendance	12.00	5.35	3	9.57	6.00	14	N S
Social Growth	2.33	.94	3	2.29	1.03	14	N S
Work Habits	2.67	.94	3	1.93	1.16	14	N S
Year 1969-70							
Attendance	11.27	12.67	41	14.88	14.85	17	N S
Social Growth	2.65	.82	40	2.71	1.02	17	N S
Work Habits	2.63	.83	40	2.82	1.10	17	N S

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
INTEGRATION-IN vs. SEGREGATION (CONTROL SCHOOL)
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE FIVE

Test and Date	Integration-In			Segregation (Con)			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
NYS El.Sch, Gr.3,Fm.A							
Word Recognition	14.00	4.56	15	12.94	5.36	36	N S
Reading	11.60	4.50	15	10.86	3.87	36	N S
Computation	8.47	2.19	15	5.69	3.21	36	Sig
Problem Solving	7.93	2.62	15	7.22	3.74	36	N S
Concepts	5.47	2.83	15	5.44	2.35	36	N S
POSTTEST: May 1970							
Iowa Test Bas. Skills							
Vocabulary	19.07	8.94	15	15.97	5.41	36	N S
Reading	35.60	13.27	15	26.81	9.88	36	Sig
Concepts	17.86	7.24	14	15.56	5.81	36	N S
Problem Solving	11.00	4.94	14	10.46	5.92	35	N S
Year 1969-70							
Attendance	7.07	7.91	15	10.72	10.93	36	N S
Social Growth	2.33	.79	15	2.39	.83	36	N S
Work Habits	2.13	.81	15	2.39	.98	36	N S

APPENDIX F

QUESTION SIX

HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS COMPARE WITH THE ACHIEVEMENT OF BLACK PUPILS IN CLASSES ALMOST COMPLETELY BLACK AT TWO INNER CITY SCHOOLS?

COMPARISON OF
INTEGRATION-OUT** vs. SEGREGATION (EXPERIMENTAL SCHOOL)**
(BLACK PUPILS)
TWO YEAR PARTICIPANTS - GRADE TWO

Test and Date	Integration-Out**			Segregation (Exp)**			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1968							
N.Y.S. Readiness	45.88	4.31	8	40.00	8.85	8	
POSTTEST: May 1970 Adjusted*							
Met.Ach. Pr.II, Fm.C							
Word Knowledge	16.09	4.92	7	17.80	4.92	8	N S
Reading	18.79	8.70	8	23.58	8.70	8	N S
Problem Solving	23.64	5.33	8	28.99	5.33	7	N S
Computation	15.89	5.59	8	23.42	5.59	7	Sig
Year 1968-69							
Attendance	18.38	13.32	8	11.71	9.13	7	N S
Social Growth	3.00	.87	8	2.57	.73	7	N S
Work Habits	3.13	.78	8	2.71	.70	7	N S
Year 1969-70							
Attendance	14.63	9.77	8	7.50	4.80	8	N S
Social Growth	3.13	.78	8	3.25	.83	8	N S
Work Habits	3.37	.86	8	3.00	.87	8	N S

* Covariance adjusted posttest means for each corresponding pretest variable

** A subgroup selected specifically for matching purposes and thus not representative of the total Grade Two sample used elsewhere

COMPARISON OF
SEGREGATION (EXPERIMENTAL SCHOOL) vs. INTEGRATION-OUT
(BLACK PUPILS)
TWO YEAR PARTICIPANTS - GRADE FOUR

Test and Date	Segregation (Exp)			Integration-Out			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1968							
NYS El.Sch, Gr.3,Fm.A							
Word Recognition	13.20	4.56	15	12.22	5.49	9	N S
Reading	10.71	3.08	14	12.22	5.43	9	N S
Problem Solving	7.13	3.62	16	9.44	4.40	9	N S
Concepts	4.00	2.22	15	4.89	3.41	9	N S
POSTTEST: May 1970 Adjusted*							
Iowa Test Bas. Skills							
Vocabulary	15.19	6.54	15	18.24	6.54	9	N S
Reading	29.61	8.75	14	26.16	8.75	9	N S
Problem Solving	15.29	4.28	16	18.15	4.28	9	N S
Concepts	12.27	3.79	16	11.97	3.79	9	N S
Year 1968-69							
Attendance	15.87	11.24	15	13.75	6.36	8	N S
Social Growth	2.80	.54	15	3.13	.60	8	N S
Work Habits	3.07	.68	15	3.25	.43	8	N S
Year 1969-70							
Attendance	11.69	9.21	16	15.56	15.61	9	N S
Social Growth	2.56	.70	16	2.67	1.05	9	N S
Work Habits	3.06	.75	16	2.44	.83	9	N S

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
SEGREGATION (EXPERIMENTAL SCHOOL) vs. INTEGRATION-OUT
(BLACK PUPILS)
TWO YEAR PARTICIPANTS - GRADE FIVE

Test and Date	Segregation (Exp)			Integration-Out			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1968							
Iowa Test Bas. Skills							
Vocabulary	11.82	4.11	11	12.13	2.98	8	
Reading	21.00	5.89	11	25.38	4.50	8	
Concepts	12.73	5.05	11	12.60	2.94	10	
Problem Solving	7.91	5.07	11	6.60	1.56	10	
POSTTEST: May 1970 Adjusted*							
Iowa Test Bas. Skills							
Vocabulary	17.89	5.60	11	15.65	5.60	8	N S
Reading	34.52	7.02	11	29.42	7.02	8	N S
Concepts	18.12	5.48	11	15.27	5.48	10	N S
Problem Solving	11.83	3.94	11	9.59	3.94	10	N S
Year 1968-69							
Attendance	11.67	8.08	9	11.13	9.91	8	N S
Social Growth	2.67	.82	9	2.89	.74	9	N S
Work Habits	2.78	.63	9	3.22	1.31	9	N S
Year 1969-70							
Attendance	12.71	9.32	7	12.50	13.39	10	N S
Social Growth	3.86	.99	7	2.80	.98	10	N S
Work Habits	2.86	1.12	7	3.00	.63	10	N S

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
SEGREGATION (EXPERIMENTAL SCHOOL) vs. INTEGRATION-OUT
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE THREE

Test and Date	Segregation (Exp)			Integration-Out			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
N.Y.S. Readiness	53.93	11.09	15	55.67	12.87	18	N S
POSTTEST: May 1970							
NYS El.Sch, Gr.3,Fm.B							
Word Recognition	16.07	5.57	14	21.28	4.48	18	Sig
Reading	15.57	4.78	14	19.56	5.56	18	Sig
Computation	11.53	3.12	15	12.88	3.08	17	N S
Problem Solving	10.47	3.98	15	13.47	3.94	17	Sig
Concepts	9.86	4.61	14	12.76	3.39	17	N S
Year 1968-69							
Attendance	5.00	2.33	7	8.75	1.30	4	Sig
Social Growth	3.00	.89	10	2.75	.83	4	N S
Work Habits	2.70	.90	10	2.50	.50	4	N S
Year 1969-70							
Attendance	11.47	9.57	15	10.61	5.74	18	N S
Social Growth	2.53	.72	15	3.06	.85	18	N S
Work Habits	2.87	1.15	15	2.89	1.15	18	N S

COMPARISON OF
INTEGRATION-OUT vs. SEGREGATION (EXPERIMENTAL SCHOOL)
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE FIVE

Test and Date	Integration-Out			Segregation (Exp)			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
NYS El.Sch,Gr.3,Fm.A							
Word Recognition	15.83	5.40	12	14.70	5.64	10	
Reading	13.08	6.38	12	9.90	5.41	10	
Problem Solving	6.25	2.52	12	5.82	3.04	11	
Concepts	8.42	2.78	12	6.91	2.87	11	
POSTTEST: May 1970 Adjusted*							
Iowa Test Bas. Skills							
Vocabulary	22.23	8.18	12	18.73	8.18	10	N S
Reading	30.36	9.48	12	32.67	9.48	10	N S
Problem Solving	15.74	6.44	12	15.65	6.44	11	N S
Concepts	7.85	3.32	12	7.89	3.32	11	N S
Year 1968-69							
Attendance	7.75	5.97	4	2.50	1.96	10	Sig
Social Growth	3.00	1.22	4	2.00	1.18	10	N S
Work Habits	3.00	1.22	4	2.30	1.10	10	N S
Year 1969-70							
Attendance	13.92	10.54	12	9.55	7.00	11	N S
Social Growth	3.33	.94	12	3.55	.78	11	N S
Work Habits	3.33	1.03	12	3.00	1.13	11	N S

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
SEGREGATION (EXPERIMENTAL SCHOOL) vs. INTEGRATION-OUT
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE SIX

Test and Date	Segregation (Exp)			Integration-Out			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
Iowa Test Bas. Skills							
Vocabulary	9.38	4.05	26	10.92	4.18	13	
Reading	21.62	8.09	26	19.15	6.00	13	
Concepts	11.80	4.75	25	9.69	2.55	13	
Problem Solving	7.24	3.98	25	6.31	1.64	13	
POSTTEST: May 1970 Adjusted*							
NYS El.Sch, Gr.6,Fm.B							
Word Recognition	16.50	5.85	26	13.09	5.85	13	N S
Reading	19.98	6.44	26	21.26	6.44	13	N S
Concepts	7.43	2.99	25	7.25	2.99	13	N S
Problem Solving	10.26	4.04	25	8.12	4.04	13	N S
Year 1968-69							
Attendance	4.33	5.54	9	6.33	4.06	9	N S
Social Growth	2.44	.83	9	2.89	.31	9	N S
Work Habits	2.44	1.07	9	2.89	.57	9	N S
Year 1969-70							
Attendance	10.46	10.92	26	13.13	12.74	8	N S
Social Growth	3.00	.78	26	2.88	.93	8	N S
Work Habits	3.19	.92	26	3.50	1.22	8	N S

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
SEGREGATION (CONTROL SCHOOL) vs. INTEGRATION-OUT
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE THREE

Test and Date	Segregation (Con)			Integration-Out			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
N.Y.S. Readiness	49.59	15.67	41	55.67	12.87	18	
POSTTEST: May 1970 Adjusted*							
NYS El.Sch, Gr.3,Fm.B							
Word Recognition	16.30	5.46	41	20.82	5.46	18	Sig
Reading	13.98	4.58	41	18.88	4.58	18	Sig
Computation	10.57	3.36	38	12.55	3.36	17	Sig
Problem Solving	8.85	3.94	37	13.20	3.94	17	Sig
Concepts	7.55	3.84	37	12.39	3.84	17	Sig
Year 1968-69							
Attendance	12.00	5.35	3	8.75	1.30	4	N S
Social Growth	2.33	.94	3	2.75	.83	4	N S
Work Habits	2.67	.94	3	2.50	.50	4	N S
Year 1969-70							
Attendance	11.27	12.68	41	10.61	5.74	18	N S
Social Growth	2.65	.82	40	3.06	.85	18	N S
Work Habits	2.63	.83	40	2.89	1.15	18	N S

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
INTEGRATION-OUT vs. SEGREGATION (CONTROL SCHOOL)
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE FIVE

Test and Date	Integration-Out			Segregation (Con)			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
NYS El.Sch, Gr.3,Fm.A							
Word Recognition	15.83	5.40	12	12.94	5.36	36	
Reading	13.08	6.38	12	10.86	3.87	36	
Problem Solving	6.25	2.52	12	5.44	2.35	36	
Concepts	8.42	2.78	12	7.23	3.80	35	
POSTTEST: May 1970 Adjusted*							
Iowa Test Bas. Skills							
Vocabulary	21.34	6.84	12	16.36	6.84	36	Sig
Reading	29.66	6.98	12	27.81	6.98	36	N S
Problem Solving	15.68	5.94	12	15.66	5.94	36	N S
Concepts	7.68	4.86	12	10.68	4.86	35	N S
Year 1969-70							
Attendance	13.92	10.54	12	10.72	10.93	36	N S
Social Growth	3.33	.94	12	2.39	.83	36	Sig
Work Habits	3.33	1.03	12	2.39	.98	36	Sig

* Covariance adjusted posttest means for each corresponding pretest variable

APPENDIX G

QUESTION SEVEN

HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN AN INNER CITY SCHOOL COMPARE WITH THAT OF

WHITE PUPILS IN THE SAME INTEGRATED SETTING

BLACK PUPILS IN THE SAME SETTING WHO HAD ONE YEAR OF INTEGRATION SUCCEEDING PRIOR SEGREGATED SCHOOL EXPERIENCES AND

WHITE PUPILS WHO ATTENDED THEIR OWN NEIGHBORHOOD SCHOOLS?

COMPARISON OF
INTEGRATION-IN (WHITE)* vs. INTEGRATION-IN (BLACK)*
THREE YEAR PARTICIPANTS - GRADE THREE

Test and Date	Integration-In (W)* Mean	St Dev	N	Integration-In (B)* Mean	St Dev	N	t
PRETEST: Sept. 1967							
N.Y.S. Readiness	60.20	11.27	10	61.14	11.53	14	N S
POSTTEST: May 1970							
NYS El.Sch, Gr.3,Fm.B							
Word Recognition	19.80	4.38	10	21.43	3.31	14	N S
Reading	19.10	5.86	10	19.93	4.43	14	N S
Computation	13.40	1.62	10	13.69	1.38	13	N S
Problem Solving	15.00	3.66	10	13.62	1.98	13	N S
Concepts	12.90	5.82	10	13.31	3.07	13	N S
Year 1968-69							
Attendance	2.00	1.41	3	9.42	5.69	12	N S
Social Growth	2.67	.94	3	2.33	1.03	12	N S
Work Habits	2.00	.82	3	1.83	1.07	12	N S
Year 1969-70							
Attendance	7.80	3.71	10	15.07	15.45	14	N S
Social Growth	2.80	1.17	10	2.64	1.04	14	N S
Work Habits	2.90	1.22	10	2.86	1.12	14	N S

* A subgroup selected specifically for matching purposes and thus not representative of the total Grade Three sample used elsewhere

COMPARISON OF
INTEGRATION-IN (BLACK) vs. INTEGRATION-IN (WHITE)
THREE YEAR PARTICIPANTS - GRADE FOUR

Test and Date	Integration-In (B)			Integration-In (W)			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
Met. Ach. Pr.II, Fm.A							
Word Knowledge	15.67	8.01	15	16.41	7.02	17	N S
Reading	17.13	12.24	15	17.24	10.87	17	N S
Problem Solving	17.93	5.26	15	15.56	8.95	18	N S
Computation	9.27	3.40	15	11.17	4.15	18	N S
POSTTEST: May 1970							
Iowa Test Bas. Skills							
Vocabulary	19.21	8.65	14	26.18	10.18	17	N S
Reading	28.67	9.11	15	40.67	16.66	18	Sig
Concepts	16.13	3.79	15	24.11	8.17	18	Sig
Problem Solving	10.67	4.25	15	15.28	5.93	18	Sig
Year 1968-69							
Attendance	3.75	2.05	8	4.50	3.46	16	N S
Social Growth	2.75	1.09	8	2.25	.90	16	N S
Work Habits	2.63	.86	8	2.38	.78	16	N S
Year 1969-70							
Attendance	6.50	5.15	14	11.72	6.18	18	Sig
Social Growth	2.43	.90	14	2.39	.95	18	N S
Work Habits	2.93	1.10	14	2.44	1.38	18	N S

COMPARISON OF
INTEGRATION-IN (BLACK)* vs. INTEGRATION-IN (WHITE)*
THREE YEAR PARTICIPANTS - GRADE SIX

Test and Date	Integration-In (B)*			Integration-In (W)*			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
Iowa Test Bas. Skills							
Vocabulary	19.54	6.20	13	18.58	8.30	12	N S
Reading	35.46	9.42	13	35.33	9.84	12	N S
Concepts	14.54	5.51	13	16.42	6.53	12	N S
Problem Solving	12.08	4.03	13	12.58	4.33	12	N S
POSTTEST: May 1970							
NYS El.Sch, Gr.6,Fm.B							
Word Recognition	22.15	4.74	13	22.92	5.88	12	N S
Reading	26.08	5.38	13	28.33	5.75	12	N S
Computation	14.92	3.38	13	13.92	3.43	12	N S
Problem Solving	12.15	4.00	13	13.58	4.01	12	N S
Concepts	10.54	2.17	13	12.08	3.88	12	N S
Year 1968-69							
Attendance	3.45	2.23	11	3.89	3.07	9	N S
Social Growth	2.09	1.08	11	2.11	.74	9	N S
Work Habits	1.45	.66	11	2.00	.82	9	N S
Year 1969-70							
Attendance	5.00	6.30	13	11.42	7.63	12	Sig
Social Growth	2.92	1.14	13	2.33	1.11	12	N S
Work Habits	2.54	1.22	13	2.42	1.38	12	N S

* A subgroup selected specifically for matching purposes and thus not representative of the total Grade Six sample used elsewhere

COMPARISON OF
INTEGRATION-IN vs. TWO YEARS SEGREGATION FOLLOWED BY
ONE YEAR INTEGRATION-IN (SSI; EXPERIMENTAL SCHOOL)
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE THREE

Test and Date	Integration-In			SSI (Exp)			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
N.Y.S. Readiness	57.35	13.91	17	60.74	15.89	19	
POSTTEST: May 1970 Adjusted*							
NYS El Sch, Gr.3,Fm.B							
Word Recognition	21.38	4.03	17	21.56	4.03	19	N S
Reading	19.60	3.78	17	20.51	3.78	19	N S
Computation	13.32	1.51	16	14.26	1.51	19	N S
Problem Solving	13.37	2.82	16	13.06	2.82	19	N S
Concepts	13.48	2.74	16	12.49	2.74	19	N S
Year 1968-69							
Attendance	9.57	6.00	14	5.46	4.89	11	N S
Social Growth	2.29	1.03	14	2.09	1.08	11	N S
Work Habits	1.93	1.16	14	2.18	1.11	11	N S
Year 1969-70							
Attendance	14.88	14.85	17	7.63	5.47	19	N S
Social Growth	2.71	1.02	17	2.47	.88	19	N S
Work Habits	2.82	1.10	17	3.00	.92	19	N S

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
INTEGRATION-IN vs. TWO YEARS SEGREGATION FOLLOWED BY
ONE YEAR INTEGRATION-IN (SSI; EXPERIMENTAL SCHOOL)
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE FIVE

Test and Date	Integration-In			SSI (Exp)			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
NYS El.Sch, Gr.3,Fm.A							
Word Recognition	14.00	4.56	15	15.33	4.74	9	N S
Reading	11.60	4.50	15	11.33	3.37	9	N S
Computation	8.47	2.19	15	6.80	3.52	10	N S
Problem Solving	7.93	2.62	15	6.70	4.05	10	N S
Concepts	5.47	2.83	15	4.50	2.38	10	N S
POSTTEST: May 1970							
Iowa Test Bas. Skills							
Vocabulary	19.07	8.94	15	22.50	8.08	10	N S
Reading	35.60	13.27	15	38.20	12.55	10	N S
Concepts	17.86	7.24	14	19.10	8.04	10	N S
Problem Solving	11.00	4.94	14	13.20	4.19	10	N S
Year 1968-69							
Attendance	2.60	2.62	10	3.75	3.03	8	N S
Social Growth	2.90	1.04	10	2.13	.93	8	N S
Work Habits	3.00	.45	10	2.50	1.00	8	N S
Year 1969-70							
Attendance	7.07	7.91	15	7.00	6.10	10	N S
Social Growth	2.33	.79	15	2.40	.66	10	N S
Work Habits	2.13	.81	15	2.90	.70	10	Sig

COMPARISON OF
INTEGRATION-OUT (WHITE)* vs. INTEGRATION-IN (BLACK)*
THREE YEAR PARTICIPANTS - GRADE THREE

Test and Date	Integration-Out(W)*			Integration-In (B)*			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
N.Y.S. Readiness	64.00	8.03	12	61.14	11.53	14	N S
POSTTEST: May 1970							
NYS El.Sch, Gr.3,Fm.B							
Word Recognition	21.58	3.25	12	21.43	3.31	14	N S
Reading	21.25	4.53	12	19.93	4.43	14	N S
Computation	13.92	.76	12	13.69	1.38	13	N S
Problem Solving	15.42	2.96	12	13.62	1.98	13	N S
Concepts	15.50	1.76	12	13.31	3.07	13	Sig
Year 1968-69							
Attendance	4.17	2.11	6	9.42	5.69	12	N S
Social Growth	2.17	.69	6	2.33	1.03	12	N S
Work Habits	2.00	.58	6	1.83	1.07	12	N S
Year 1969-70							
Attendance	9.42	6.38	12	15.07	15.45	14	N S
Social Growth	1.92	.64	12	2.64	1.04	14	N S
Work Habits	2.25	.92	12	2.86	1.12	14	N S

* A subgroup selected specifically for matching purposes and thus not representative of the total Grade Three sample used elsewhere

COMPARISON OF
INTEGRATION-IN (BLACK) vs. INTEGRATION-OUT (WHITE)
THREE YEAR PARTICIPANTS - GRADE FOUR

Test and Date	Integration-In (B)			Integration-Out (W)			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1968							
Met.Ach. Pr.II,Fm.A							
Word Knowledge	16.36	7.85	14	21.70	10.22	10	
Reading	17.13	12.24	15	29.20	14.88	10	
Problem Solving	17.93	5.26	15	24.80	7.10	10	
POSTTEST: May 1970 Adjusted*							
Iowa Test Bas.Skills							
Vocabulary	19.93	7.79	14	27.70	7.79	14	Sig
Reading	31.47	8.00	15	40.39	8.00	10	Sig
Problem Solving	11.90	4.84	15	14.55	4.84	10	N S
Year 1968-69							
Attendance	3.75	2.05	8	3.22	2.48	9	N S
Social Growth	2.75	1.09	8	1.78	.63	9	Sig
Work Habits	2.63	.86	8	1.78	.79	9	N S
Year 1969-70							
Attendance	6.50	5.15	14	9.60	9.96	10	N S
Social Growth	2.43	.90	14	1.90	.70	10	N S
Work Habits	2.93	1.10	14	1.80	.87	10	Sig

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
INTEGRATION-IN (BLACK)* vs. INTEGRATION-OUT (WHITE)*
THREE YEAR PARTICIPANTS - GRADE SIX

Test and Date	Integration-In(B)*			Integration-Out(W)*			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
Iowa Test Bas. Skills							
Vocabulary	19.54	6.20	13	22.17	9.14	12	N S
Reading	35.46	9.42	13	37.33	9.72	12	N S
Concepts	14.54	5.51	13	19.00	4.38	12	Sig
Problem Solving	12.08	4.03	13	13.92	4.63	12	N S
POSTTEST: May 1970							
NYS El.Sch, Gr.6,Fm.B							
Word Recognition	22.15	4.74	13	25.18	4.65	11	N S
Reading	26.08	5.38	13	27.18	6.71	11	N S
Computation	14.92	3.38	13	16.58	2.84	12	N S
Problem Solving	12.15	4.00	13	14.83	2.94	12	N S
Concepts	10.54	2.17	13	13.17	4.08	12	N S
Year 1968-69							
Attendance	3.45	2.23	11	2.88	2.32	8	N S
Social Growth	2.09	1.08	11	1.33	.47	9	N S
Work Habits	1.45	.66	11	1.78	.79	9	N S
Year 1969-70							
Attendance	5.00	6.30	13	8.50	3.99	12	N S
Social Growth	2.92	1.14	13	2.00	1.15	12	N S
Work Habits	2.54	1.22	13	2.08	1.11	12	N S

* A subgroup selected specifically for matching purposes and thus not representative of the total Grade Six sample used elsewhere

APPENDIX H

QUESTION EIGHT

HOW DOES THE ACHIEVEMENT OF BLACK PUPILS, SEGREGATED IN AN INNER CITY SCHOOL WHICH HAS SPECIALLY FUNDED REMEDIAL AND ENRICHMENT SERVICES ALONG WITH PURPOSEFULLY INTEGRATED CLASSES, COMPARE WITH THAT OF BLACK PUPILS IN SEGREGATED CLASSES OF SIMILAR SIZE AND HAVING REMEDIAL SERVICES, BUT FEWER SPECIALLY FUNDED ENRICHMENT EXPERIENCES AND RELATIVELY NO INTEGRATED OPPORTUNITIES?

COMPARISON OF
SEGREGATION (EXPERIMENTAL SCHOOL) vs. SEGREGATION (CONTROL SCHOOL)
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE THREE

Test and Date	Segregation (Exp)			Segregation (Con)			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
N.Y.S. Readiness	53.93	11.09	15	50.24	16.04	42	N S
POSTTEST: May 1970							
NYS El.Sch, Gr.3,Fm.B							
Word Recognition	16.07	5.57	14	16.10	5.65	41	N S
Reading	15.57	4.78	14	13.68	4.22	41	N S
Computation	11.53	3.12	15	10.42	3.84	38	N S
Problem Solving	10.47	3.98	15	8.73	3.54	37	N S
Concepts	9.86	4.61	14	7.38	3.86	37	N S
Year 1968-69							
Attendance	5.00	2.33	7	12.00	5.35	3	Sig
Social Growth	3.00	.89	10	2.33	.94	3	N S
Work Habits	2.70	.90	10	2.67	.94	3	N S
Year 1969-70							
Attendance	11.47	9.57	15	11.27	12.67	41	N S
Social Growth	2.53	.72	15	2.65	.82	40	N S
Work Habits	2.87	1.15	15	2.63	.83	40	N S

COMPARISON OF
SEGREGATION (EXPERIMENTAL SCHOOL) vs. SEGREGATION (CONTROL SCHOOL)
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE FIVE

Test and Date	Segregation (Exp) Mean	St Dev	N	Segregation (Con) Mean	St Dev	N	t
PRETEST: Sept. 1967							
NYS El.Sch, Gr.3,Fm.A							
Word Recognition	14.45	5.43	11	12.94	5.36	36	N S
Reading	9.82	5.17	11	10.86	3.87	36	N S
Computation	5.55	3.39	11	5.69	3.21	36	N S
Problem Solving	6.91	2.87	11	7.22	3.74	36	N S
Concepts	5.82	3.04	11	5.44	2.35	36	N S
POSTTEST: May 1970							
Iowa Test Bas. Skills							
Vocabulary	18.40	4.67	10	15.97	5.41	36	N S
Reading	29.90	13.39	10	26.81	9.88	36	N S
Concepts	15.36	7.93	11	15.56	5.81	36	N S
Problem Solving	7.36	4.35	11	10.46	5.92	35	N S
Year 1969-70							
Attendance	9.55	7.00	11	10.72	10.93	36	N S
Social Growth	3.55	.78	11	2.39	.83	36	Sig
Work Habits	3.00	1.13	11	2.39	.98	36	N S

APPENDIX I

QUESTION NINE

HOW DOES THE ACHIEVEMENT OF BLACK PUPILS HAVING TWO YEARS OF SEGREGATION AND ONE YEAR OF INTEGRATION IN AN INNER CITY SCHOOL WHICH HAS SPECIALLY FUNDED REMEDIAL AND ENRICHMENT SERVICES ALONG WITH INTEGRATED CLASSES COMPARE WITH THAT OF

BLACK SEGREGATED PUPILS IN THE SAME SCHOOL
AND

BLACK PUPILS IN ANOTHER SCHOOL IN SEGREGATED CLASSES OF SIMILAR SIZE AND HAVING REMEDIAL SERVICES, BUT FEWER SPECIALLY FUNDED ENRICHMENT EXPERIENCES AND RELATIVELY NO INTEGRATED OPPORTUNITIES?

COMPARISON OF
SEGREGATION (EXPERIMENTAL SCHOOL) vs. TWO YEARS SEGREGATION
FOLLOWED BY ONE YEAR INTEGRATION-IN (SSI; EXPERIMENTAL SCHOOL)
(BLACK PUPILS)
TWO YEAR PARTICIPANTS - GRADE FIVE

Test and Date	Segregation (Exp)			SSI (Exp)			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1968							
Iowa Test Bas. Skills							
Vocabulary	11.82	4.11	11	16.29	3.92	7	Sig
Reading	21.00	5.89	11	23.63	8.15	8	N S
Concepts	12.73	5.05	11	10.67	2.26	9	N S
Problem Solving	7.91	5.07	11	8.44	4.17	9	N S
POSTTEST: May 1970							
Iowa Test Bas. Skills							
Vocabulary	17.91	5.65	11	20.56	6.31	9	N S
Reading	33.45	8.00	11	32.22	9.80	9	N S
Concepts	18.18	7.74	11	17.78	5.71	9	N S
Problem Solving	12.00	4.39	11	11.43	6.82	7	N S
Year 1968-69							
Attendance	11.67	8.08	9	20.50	12.09	4	N S
Social Growth	2.67	.82	9	3.00	1.22	4	N S
Work Habits	2.78	.63	9	3.00	1.41	4	N S
Year 1969-70							
Attendance	12.71	9.32	7	18.78	22.84	9	N S
Social Growth	3.86	.99	7	2.89	.99	9	N S
Work Habits	2.86	1.12	7	3.22	.92	9	N S

COMPARISON OF
SEGREGATION (EXPERIMENTAL SCHOOL) vs. TWO YEARS SEGREGATION FOLLOWED BY ONE YEAR INTEGRATION-IN (SSI; EXPERIMENTAL SCHOOL)
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE THREE

Test and Date	Segregation (Exp)			SSI (Exp)			t or F
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
N.Y.S. Readiness	53.64	11.42	14	60.74	15.89	19	
POSTTEST: May 1970 Adjusted*							
NYS El.Sch, Gr.3,Fm.B							
Word Recognition	15.93	5.65	14	21.69	5.65	19	Sig
Reading	15.87	4.79	14	20.52	4.79	19	Sig
Computation	11.70	2.37	15	14.18	2.37	19	Sig
Problem Solving	10.79	3.67	15	12.96	3.67	19	N S
Concepts	9.97	3.81	14	12.49	3.81	19	N S
Year 1968-69							
Attendance	5.00	2.33	7	5.45	4.89	11	N S
Social Growth	3.00	.89	10	2.09	1.08	11	N S
Work Habits	2.70	.90	10	2.18	1.11	11	N S
Year 1969-70							
Attendance	11.47	9.57	15	7.63	5.47	19	N S
Social Growth	2.53	.72	15	2.47	.88	19	N S
Work Habits	2.87	1.15	15	3.00	.92	19	N S

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
SEGREGATION (EXPERIMENTAL SCHOOL) vs. TWO YEARS SEGREGATION
FOLLOWED BY ONE YEAR INTEGRATION-IN (SSI; EXPERIMENTAL SCHOOL)
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE FIVE

Test and Date	Segregation (Exp)			SSI (Exp)			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
NYS El.Sch, Gr.3,Fm.A							
Word Recognition	14.45	5.43	11	15.33	4.74	9	N S
Reading	9.82	5.17	11	11.33	3.37	9	N S
Computation	5.55	3.39	11	6.80	3.52	10	N S
Problem Solving	6.91	2.87	11	6.70	4.05	10	N S
Concepts	5.82	3.04	11	4.50	2.38	10	N S
POSTTEST: May 1970							
Iowa Test Bas. Skills							
Vocabulary	18.40	4.67	10	22.50	8.08	10	N S
Reading	29.90	13.39	10	38.20	12.55	10	N S
Concepts	15.36	7.93	11	19.10	8.04	10	N S
Problem Solving	7.36	4.35	11	13.20	4.19	10	Sig
Year 1968-69							
Attendance	2.50	1.96	10	3.75	3.03	8	N S
Social Growth	2.00	1.18	10	2.13	.93	8	N S
Work Habits	2.30	1.10	10	2.50	1.00	8	N S
Year 1969-70							
Attendance	9.55	7.00	11	7.00	6.10	10	N S
Social Growth	3.55	.78	11	2.40	.66	10	Sig
Work Habits	3.00	1.13	11	2.90	.70	10	N S

COMPARISON OF
SEGREGATION (CONTROL SCHOOL) vs. TWO YEARS SEGREGATION
FOLLOWED BY ONE YEAR INTEGRATION-IN (SSI; EXPERIMENTAL SCHOOL)
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE THREE

Test and Date	Segregation (Con)			SSI (Exp)			
	Mean	St Dev	N	Mean	St Dev	N	t or F
PRETEST: Sept. 1967							
N.Y.S. Readiness	49.59	15.67	41	60.74	15.89	19	
POSTTEST: May 1970 Adjusted*							
NYS El.Sch, Gr.3,Fm.B							
Word Recognition	16.27	5.68	41	21.20	5.68	19	Sig
Reading	14.14	4.41	41	19.76	4.41	19	Sig
Computation	10.69	3.22	38	13.79	3.22	19	Sig
Problem Solving	8.97	3.73	37	12.74	3.73	19	Sig
Concepts	7.69	3.71	37	11.97	3.71	19	Sig
Year 1968-69							
Attendance	12.00	5.35	3	5.45	4.89	11	N S
Social Growth	2.33	.94	3	2.09	1.08	11	N S
Work Habits	2.67	.94	3	2.18	1.11	11	N S
Year 1969-70							
Attendance	11.27	12.67	41	7.63	5.47	19	N S
Social Growth	2.65	.82	40	2.47	.88	19	N S
Work Habits	2.63	.83	40	3.00	.92	19	N S

* Covariance adjusted posttest means for each corresponding pretest variable

COMPARISON OF
SEGREGATION (CONTROL SCHOOL) vs. TWO YEARS SEGREGATION
FOLLOWED BY ONE YEAR INTEGRATION-IN (SSI; EXPERIMENTAL SCHOOL)
(BLACK PUPILS)
THREE YEAR PARTICIPANTS - GRADE FIVE

Test and Date	Segregation (Con)			SSI (Exp)			t
	Mean	St Dev	N	Mean	St Dev	N	
PRETEST: Sept. 1967							
NYS El.Sch, Gr.3,Fm.A							
Word Recognition	12.94	5.36	36	15.33	4.74	9	N S
Reading	10.86	3.87	36	11.33	3.37	9	N S
Computation	5.69	3.21	36	6.80	3.52	10	N S
Problem Solving	7.22	3.74	36	6.70	4.05	10	N S
Concepts	5.44	2.35	36	4.50	2.38	10	N S
POSTTEST: May 1970							
Iowa Test Bas. Skills							
Vocabulary	15.97	5.41	36	22.50	8.08	10	Sig
Reading	26.81	9.88	36	38.20	12.55	10	Sig
Concepts	15.56	5.81	36	19.10	8.04	10	N S
Problem Solving	10.46	5.92	35	13.20	4.19	10	N S
Year 1969-70							
Attendance	10.72	10.93	36	7.00	6.10	10	N S
Social Growth	2.39	.83	36	2.40	.66	10	N S
Work Habits	2.39	.98	36	2.90	.70	10	N S

APPENDIX J

COMPARISONS AND ANALYSES USING
NEW YORK STATE PUPIL EVALUATION PROGRAM RESULTS
GRADE 1-3 (1967-69); GRADE 3-6 (1066-69)

CODE:

A - EXPERIMENTAL SCHOOL
B - COMPENSATORY SCHOOL
C - SEGREGATED CONTROL SCHOOL
C-1 - SEGREGATED CONTROL SCHOOL - CHECK 1
C-2 - SEGREGATED CONTROL SCHOOL - CHECK 2
D - EIGHT OUTER CITY SCHOOLS (COMBINED)

TABLE 1

COMPARISONS AMONG COMPONENT SCHOOLS FOR TWO AND THREE YEAR PARTICIPANTS HAVING COMPLETE NYSPEP DATA

Descriptive Element	NYSPEP Percentile Scores						
	Comparee 1			Comparee 2			
	Mean	St.Dev	N	Mean	St.Dev	N	t
PRETEST: GR. 1 ('67)							
Sch. A vs. Sch. B	52.18	26.20	60	28.15	18.73	40	Sig
Sch. A vs. Sch. C	52.18	26.20	60	33.98	22.89	44	Sig
Sch. B vs. Sch. C	28.15	18.73	40	33.98	22.89	44	NS
POSTTEST: GR. 3 ('69)							
Sch. A vs. Sch. B							
Reading	50.62	27.95	60	41.15	19.85	39	NS
Math	43.43	26.26	60	37.38	20.69	40	NS
Sch. A vs. Sch. C							
Reading	50.62	27.95	60	22.03	15.75	39	Sig
Math	43.43	26.26	60	13.05	10.13	43	Sig
Sch. B vs. Sch. C							
Reading	41.15	19.85	39	22.03	15.74	39	Sig
Math	37.38	20.69	40	13.05	10.13	43	Sig
PRETEST: GR. 3 ('66)							
Sch. A vs. Sch. C							
Reading	45.23	24.90	43	35.35	19.94	31	NS
Math	42.79	21.97	43	25.65	13.65	31	Sig
POSTTEST: GR. 6 ('69)							
Sch. A vs. Sch. C							
Reading	37.13	19.04	40	26.67	19.53	30	Sig
Math	35.40	24.23	40	16.53	11.53	30	Sig

NOTE: For code interpretation see title page for Appendix J

TABLE 2

COMPARISON WITHIN COMPONENT SCHOOLS FOR TWO AND THREE YEAR PARTICIPANTS HAVING COMPLETE NYSPEP DATA

Descriptive Element	NYSPEP Percentile Scores						
	Comparee 1-Pre			Comparee 2-Post			
	Mean	St.Dev	N	Mean	St.Dev	N	t
GRADE 1 ('67) VS. GRADE 3 ('69)							
School A							
Readiness vs. Rdg.	52.18	26.20	60	50.62	27.95	60	NS
Readiness vs. Math	52.18	26.20	60	43.43	26.26	60	Sig
School B							
Readiness vs. Rdg.	28.36	18.93	39	41.15	19.85	39	Sig
Readiness vs. Math	28.36	18.93	39	37.50	20.93	39	Sig
School C							
Readiness vs. Rdg.	35.53	23.99	38	22.47	15.69	38	Sig
Readiness vs. Math	35.53	23.99	38	13.68	10.35	38	Sig
GRADE 3 ('66) VS. GRADE 6 ('69)							
School A							
Reading vs. Reading	44.50	25.16	40	37.13	19.04	40	Sig
Arithmetic vs. Math	42.50	22.18	40	35.40	24.23	40	Sig
School C							
Reading vs. Reading	34.87	20.09	30	26.67	19.53	30	Sig
Arithmetic vs. Math	25.17	13.61	30	16.53	11.53	30	Sig

NOTE: For code identification see title page for Appendix J

TABLE 3

COMPARISONS WITHIN THE COMBINED OUTER CITY SCHOOLS (N=8)
FOR TWO AND THREE YEAR PARTICIPANTS HAVING COMPLETE NYSPEP DATA

Descriptive Element	NYSPEP Percentile Scores						t
	Comparee 1-Pre			Comparee 2-Post			
	Mean	St.Dev	N	Mean	St.Dev	N	
GRADE 1 ('67) VS. GRADE 3 ('69)							
Readiness vs. Rdg.	58.59	25.76	338	56.63	27.96	358	NS
Readiness vs. Math	58.59	27.76	338	49.59	27.17	338	Sig
GRADE 3 ('66) VS. GRADE 6 ('69)							
Reading vs. Reading	56.55	24.68	300	50.73	27.82	300	Sig
Arithmetic vs. Math	50.33	19.84	313	43.41	23.65	313	Sig

NOTE: For code identification see title page for Appendix J

TABLE 4

COMPARISONS AMONG CONTROL AND CONTROL CHECK SCHOOLS FOR TWO AND THREE YEAR PARTICIPANTS HAVING COMPLETE NYSPEP DATA

Descriptive Element	NYSPEP Percentile Scores						
	Comparee 1			Comparee 2			
	Mean	St.Dev	N	Mean	St.Dev	N	t
PRETEST: GR. 1 ('67)							
Sch. C vs. Sch. C-1	33.98	22.89	44	29.39	18.53	80	NS
Sch. C vs. Sch. C-2	33.98	22.89	44	31.47	20.33	55	NS
Sch. C-1 vs. Sch. C-2	29.39	18.53	80	31.47	20.33	55	NS
POSTTEST: GR. 3 ('69)							
Sch. C vs. Sch. C-1							
Reading	22.03	15.74	39	17.19	13.91	75	NS
Math	13.05	10.13	42	20.96	15.05	70	Sig
Sch. C vs. Sch. C-2							
Reading	22.03	15.74	39	24.71	21.35	51	NS
Math	13.05	10.13	43	19.28	17.56	54	Sig
Sch. C-1 vs. Sch. C-2							
Reading	17.19	13.91	75	24.71	21.35	51	Sig
Math	20.96	15.05	70	19.28	17.56	54	NS
PRETEST: GR. 3 ('66)							
Sch. C vs. Sch. C-1							
Reading	35.35	19.94	31	24.25	18.88	72	Sig
Arithmetic	25.65	13.65	31	20.56	15.57	72	NS
Sch. C vs. Sch. C-2							
Reading	35.35	19.94	31	24.67	21.83	46	Sig
Arithmetic	25.65	13.65	31	23.15	17.24	46	NS
Sch. C-1 vs. Sch. C-2							
Reading	24.25	18.88	72	24.67	21.83	46	NS
Arithmetic	20.56	15.57	72	23.15	17.24	46	NS
POSTTEST: GR. 6 ('69)							
Sch. C vs. Sch. C-1							
Reading	26.67	19.53	30	22.16	20.81	68	NS
Math	16.53	11.53	30	20.26	15.54	66	NS
Sch. C vs. Sch. C-2							
Reading	26.67	19.53	30	21.17	19.51	42	NS
Math	16.53	11.53	30	14.61	10.12	44	NS
Sch. C-1 vs. Sch. C-2							
Reading	22.16	20.81	68	21.17	19.51	42	NS
Math	20.26	15.54	66	14.61	10.12	44	Sig

NOTE: For code identification see title page for Appendix J

TABLE 5

COMPARISONS WITHIN CONTROL AND CONTROL CHECK SCHOOLS FOR TWO AND THREE YEAR PARTICIPANTS HAVING COMPLETE NYSPEP DATA

Descriptive Element	NYSPEP Percentile Scores						
	Comparee 1-Pre			Comparee 2-Post			
	Mean	St.Dev	N	Mean	St.Dev	N	t
GRADE 1 ('67) VS. GRADE 3 ('69)							
School C-1							
Readiness vs. Rdg.	31.02	19.40	65	18.20	14.35	65	Sig
Readiness vs. Arith.	31.02	19.40	65	21.09	15.29	65	Sig
School C-2							
Readiness vs. Rdg.	31.52	20.38	51	24.71	21.35	51	NS
Readiness vs. Arith.	31.52	20.38	51	19.30	17.21	51	Sig
GRADE 3 ('66) VS. GRADE 6 ('69)							
School C-1							
Reading vs. Reading	24.79	19.19	68	22.16	20.81	68	NS
Arithmetic vs. Math	20.38	15.34	66	20.26	15.54	66	NS
School C-2							
Reading vs. Reading	25.57	22.44	42	21.17	19.51	42	Sig
Arithmetic vs. Math	23.52	17.51	44	14.61	10.12	44	Sig

NOTE: For code identification see title page for Appendix J

TABLE 6

COMPARISONS AMONG COMPONENT AND CONTROL CHECK SCHOOLS FOR TWO AND THREE YEAR PARTICIPANTS HAVING COMPLETE NYSPEP DATA

Descriptive Element	NYSPEP Percentile Scores						
	Comparee 1			Comparee 2			
	Mean	St.Dev	N	Mean	St.Dev	N	t
PRETEST: GR. 1 ('69)							
Sch. A vs. Sch. C-1	52.18	26.19	60	29.38	18.52	50	Sig
Sch. A vs. Sch. C-2	52.18	26.19	60	31.47	20.33	55	Sig
POSTTEST: GR. 3 ('69)							
Sch. A vs. Sch. C-1							
Reading	50.61	27.95	60	17.15	13.91	75	Sig
Math	43.43	26.26	60	20.95	15.05	70	Sig
Sch. A vs. Sch. C-2							
Reading	50.61	27.95	60	24.70	21.35	51	Sig
Math	43.43	26.26	60	19.27	17.55	54	Sig
PRETEST: GR. 3 ('66)							
Sch. A vs. Sch. C-1							
Reading	45.23	24.90	43	24.25	18.88	72	Sig
Math	42.79	21.96	43	20.55	15.56	72	Sig
Sch. A vs. Sch. C-2							
Reading	45.23	24.90	43	24.67	21.83	46	Sig
Math	42.79	21.96	43	23.15	17.23	46	Sig
POSTTEST: GR. 6 ('69)							
Sch. A vs. Sch. C-1							
Reading	37.12	19.04	40	22.16	20.80	68	Sig
Math	35.40	24.23	40	22.98	27.03	66	Sig
Sch. A vs. Sch. C-2							
Reading	37.12	19.04	40	21.16	19.51	42	Sig
Math	35.40	24.23	40	14.61	10.12	44	Sig

NOTE: For code identification see title page for Appendix J